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ABSTRACT

This document contains a training manual and reading and math basic skills curricula for use in specific learning disability programs and/or with educably mentally handicapped and emotionally handicapped students. The training manual is intended to help special education teachers understand and use precision teaching. A brief history of the approach is followed by an examination of its three main parts: direct measurement, continuous daily measurement, and use of rate or frequency as a unit. Five steps in precision teaching are then discussed: pinpointing, counting and recording, setting aims, charting, and decisionmaking. Additional topics addressed include skill building techniques for students in various learning stages, celeration (a method of determining the trend in the student's learning), steps for effective decisionmaking, and classroom management. Ways in which precision teaching can be introduced to students are also considered. The curriculum units are organized into strands of academic skills within the content areas. The math strands include numeration, addition, subtraction, multiplication, division, decimals, word problems, fractions, and measurement; the reading strands include reading readiness, phonetic analysis, structural analysis, vocabulary development, comprehension, and study skills. The curricula are written in precision teaching terminology and the skills within each strand are presented in sequential order, with mastery skills listed first and component skills following. Specific practice sheets are included to measure most skills and are organized by strand from least to most difficult. (CL)

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A RESOURCE MANUAL FOR THE DEVELOPMENT AND EVALUATION OF SPECIAL PROGRAMS FOR EXCEPTIONAL STUDENTS

VOLUME V-D:
Techniques of Precision Teaching
Part 1: Training Manual

Bureau of Education for Exceptional Students

State of Florida
Department of Education
Tallahassee, Florida
Ralph D. Turlington, Commissioner
Affirmative action/equal opportunity employer

June 1983

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RESOURCE MANUALS

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___ Volume I-B: Florida Statutes and State Board of Education Rules: Excerpts for Programs for Exceptional Students, 1982.

___ Volume I-C: Federal Laws and Regulations Pertaining to the Education of Exceptional Students - P.L. 94-142, Sec. 504, and P.L. 89-313, 1982.

___ Volume I-E: Florida Statutes and State Board of Education Rules: Florida School for the Deaf and the Blind - Florida Department of Health and Rehabilitative Services, 1980.

Program Manuals

___ Volume II-A: Visually Impaired

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___ Volume II-I: Physically Impaired, 1977.

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___ Volume II-K: Deaf-Blind, 1982.

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INTRODUCTION

The purpose of this manual is to serve as a user's guide for Precision Teaching. It is important that teachers understand that Precision Teaching can be a valuable tool in their classrooms. Therefore, the information presented to them during beginning training needs to be clear, concise, and void of any techincal jargon. When Ogden Lindsley first developed Precision Teaching he was concerned with taking the vocabulary and techniques out of the laboratory and into the classroom where great strides could be made with students.

The approach in this manual is very simple and straightforward. The material presented is all teacher-related and has been tried in classrooms and proven to be helpful to teachers as they set up Precision Teaching. This guide should be read thoroughly and the techniques followed closely as outlined. Begin on a small scale and remember that any new technique takes some time to organize and run smoothly.

The Precision Teaching Reading and Math Basic Skills Curriculum is available with this manual. The curriculum and accompanying practice sheets can further assist the teacher in implementing Precision Teaching in the classroom.

STUDENT CHANGE - ORANGE COUNTY DATA

Precision Teaching can make a change in student learning. Teachers that use it can make observations that students are learning faster and better with this technique. Because Precision Teaching is based on collecting daily data, it is wise for those in the field to gather data to substantiate the benefits of this system.

During the 1981-82 school year classes were chosen in two elementary schools in Orange County to be trained in Precision Teaching. The scores from the Comprehensive Tests of Basic Skills were compared between these classes and the classes using the "normal" methods of monitoring.

The scores below represent the mean standard score gain for the classes in the study. The class with the asterisk marked in Elementary #1 was one in which the teacher used a large amount of drill and practice in basic math skills which is a segment of Precision Teaching.

Elementary #1

Math 3rd Grade	Mean Standard Score Gain
1. Group 1, NonPT	29
2. Group 2, PT	74
3. Group 3, PT	72
Math 5th Grade	
1. Group 1, NonPT (Special Instruction)*	76
2. Group 2, NonPT	32
3. Group 3, PT	71

Elementary #2

Reading 4th Grade	Mean Standard Score Gain
1. Group 1, NonPT	45
2. Group 2, NonPT	41
3. Group 3, PT	76
4. Group 4, PT	56

Math 5th Grade	Mean Standard Score Gain
1. Group 1, NonPT	28
2. Group 2, NonPT	28
3. Group 3, PT	61
4. Group 4, PT	43

These results indicate that Precision Teaching can make a difference in learning.

HISTORY OF PRECISION TEACHING

Precision Teaching was developed in the mid 1960's by Dr. Ogden Lindsley at the University of Kansas. Dr. Lindsley was a student of Dr. B.F. Skinner, the founder of operant conditioning. Dr. Skinner's work was based on laboratory research with lower animals. Dr. Lindsley was interested in applying these principles of operant conditioning to the management of instruction in special and regular classes. All of Lindsley's early work proved to be very successful, and is the basis of Precision Teaching as we know today. Since that time, three major projects have had significant influence on the development of precision procedures and materials, and on education in general. The experimental Education Unit at the University of Washington, the SST Screening Project conducted by the State of Washington, and the Sacajawea Project in Great Falls, Montana, have been major developers.

PRECISION TEACHING: What Is It - What Can It Do?

Skip Berquam, Port Angeles School District, Port Angeles, Washington

Can we avoid having to review and reteach so much every September? Are there programs to identify and help students with learning problems, before they get so far behind? What is mastery? Is there a way to guarantee mastery? Can we get students more involved in their own learning? How can we promote the most learning in the shortest time?

WHAT IS PRECISION TEACHING?

Precision Teaching is a procedure to measure learning and proficiency of skills. It has three main characteristics. First, it is a direct measure; second, it is a continuous or daily measure; and third, it uses rate or frequency as a unit. Let's look at these points individually.

Direct Measure. Most of the standardized tests given every year in schools are very indirect measures of student performance. They sample only small portions of individual skills, and then only in a general manner. A direct measure of reading performance would be to count the number of correct and incorrect words a student reads from a passage in his assigned reader, and then to ask him questions from that passage. If arithmetic performance is of interest, we should count the number of addition problems or division or word problems the student can do correctly. The key is to find the most direct measure of the skill of interest.

Continuous Measure. Traditionally, we measure quite infrequently in education. A measure taken at the end of a unit, or at the end of the year can provide information on ending performance, but cannot provide any feedback to be used to modify instruction during the unit. In short, occasional measurement can tell us only who has failed, while continuous measurement can pinpoint who might fail, which allows teachers to make instructional changes. Bankers, pilots, cooks, carpenters -- people in many professions use continuous or frequent measurement. It certainly is no less critical to monitor the learning progress of a child than it is the building of a house or the direction and speed of an airplane. To provide useful information, educational measurement must be done often.

Frequency of Response. It is this characteristic that separates precision teaching from other highly structured and programmed systems. The most common unit of measurement used in classrooms today is number correct or percent correct. Precision Teaching includes a time factor. We measure number correct and incorrect for a specific time period. In almost all fields, the proficient or fluent worker is not one who does every task correctly, but one who does tasks correctly within set time limits. The proficient waitress doesn't just get each order accurately, she does so quickly. We remember Babe Ruth not for one homerun, but for 60 homeruns in a season and 714 in his career. Thomas Edison invented the light bulb, but also held 1,092 other patents. Leonardo da Vinci is remembered for painting the Mona Lisa, but his other surviving works include 17 paintings, over 4,000 technical sketches, and 19 books. Frequency, or how often something happens, is a critical factor in everyday life. We have found it also to be critical for academic skills.

ADVANTAGES OF PRECISION TEACHING

Some of Precision Teaching's advantages have already been mentioned. This kind of measurement is often more valid (it measures what it is designed to measure), and more reliable (it gives a more accurate and consistent measure of performance) than traditional tests. Perhaps the greatest advantage of Precision Teaching is that it provides a measure of PROFICIENCY and a measure of LEARNING. When two students each score 100% correct on the same math paper, their performances seem to be identical. However, if one student finished in five minutes, while the other finished in ten minutes, there is a tremendous difference in performance. Rate or frequency of response will measure this difference. Once a student achieves 100% accuracy there is no way for him to show improvement, unless frequency is measured. A change in frequency is a measure of learning.

Because Precision Teaching provides useful information, it can help teachers and students get the most benefit out of the school day. We can see, for example, which students are ready to move to the next skill, which need more practice, and which need instruction. Practice, fluency building, and instructional decisions based on direct, continuous data form the foundation of Precision Teaching. Appropriate practice and instruction will allow all students to learn and to reach proficiency.

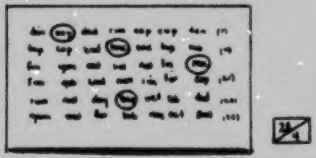
* *

Several questions were asked in the opening paragraph. Precision Teaching can help provide answers to those questions. Precision Teaching combines what has been learned about learning in the past 100 years, and applies it to practical school settings. Drill, practice, direct and frequent measurement, fluency; these are hardly new concepts in education. What Precision Teaching has done is to build them into a manageable and useful program with one goal: to promote efficient learning and proficient performance of the skills we are teaching.

Precision Teaching is easy to implement in the regular or special class. There are Five Steps To Follow.

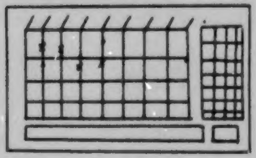
1. PINPOINTING

2. COUNTING AND RECORDING

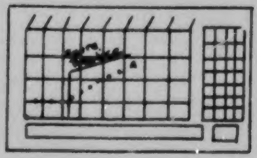


3. SETTING AIMS

4. CHARTING



5. DECISION-MAKING



PINPOINTING

PINPOINTING is choosing a behavior (academic or social) that the teacher wants to change. In order to change a behavior the teacher must be able to count it. In order to count it.....

Any Pinpointed Behavior Must:

1. Be Observable
2. Be Repeatable
3. Have A Start And End

Here are a few examples of good PINPOINTED behaviors:

Reading - reading vocabulary words (Words can be observed as they are read. Words are repeated as they are read and each word has a start and end.)

Math - writing addition facts (Digits can be observed as they are written. Digits are repeated as they are written and each digit has a start and end.)

Social Behavior - talk outs (Talk outs can be observed. If you are counting talk outs they should be repeated often enough to have a high count. Each talk out has a start and end.)

Let's get more practice with choosing good PINPOINTS......

Pretend you're trying to count the following behaviors. Read each sentence and answer with a YES or NO whether you could count the behavior or not and then check your answers on page 13.

1. "Mary has a learning disability." ____
2. "Betty is talented." ____
3. "Sue reads Houghton Mifflin vocabulary words." ____
4. "John writes answers to multiply facts." ____
5. "Sam is a poor student." ____
6. "David is autistic." ____
7. "Shirley touches the blue blocks." ____

Now let's get practice with knowing what to count. Read the following statements and choose the exact behavior you could count. Check your answers on page 13.

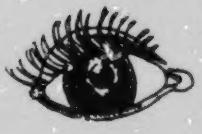
1. "Bob reads Houghton Mifflin vocabulary words." ____
2. "Angie talks out during reading class." ____
3. "Nancy writes her weekly spelling words." ____
4. "Cathy points to the letters of the alphabet." ____
5. "David tells the class important facts from a Science chapter." ____
6. "Jennifer grasps a small sponge." ____

Adapted from *Teaching and Learning in Plain English*,

Patrick McGreevy, Kansas City, Missouri, 1981.

The next step in pinpointing is learning to describe the behavior more precisely. The behavior needs to be stated in observable terms and it is necessary to discuss learning channels first.

We all receive information through one or more of the following channels. These are called INTAKE CHANNELS.



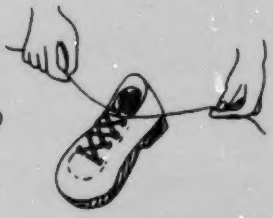
SEE

THINK

GUIDE

HEAR

We all send information out through one or more of the following channels. These are called OUTPUT CHANNELS.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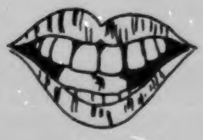
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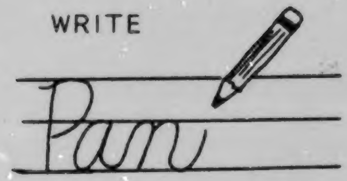
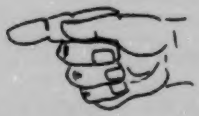
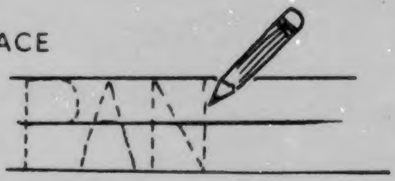


WRITE


POINT



TRACE

Adapted from Teaching and Learning in Plain English, Patrick McGreevy, Kansas City, Missouri, 1981.

Each behavior has an INTAKE and OUTPUT channel.

INTAKE CHANNEL + OUTPUT CHANNEL + PINPOINT = LEARNING STATEMENT.

PINPOINT	LEARNING STATEMENT
reading vocabulary words	see-say vocabulary words
writing addition facts	see-write addition facts
writing spelling words from dictation	hear-write CVC words
grasping a toy with partial assistance	guide-do (grasp toy)
writing history facts after a lecture	think-write history facts

Look at the examples below and decide upon the correct INTAKE and OUTPUT channels and write the Learning Statement for each one. Check your answers with the key on page 13.

1. John writes answers on a multiplcation fact sheet. ____
2. Sue reads Houghton Mifflin vocabulary words. ____
3. Nancy's teacher calls her weekly spelling words out to her and she writes them. ____
4. David's hand is guided as he ties his shoe. ____
5. Cindy feels the shape of the letter and says the sound. ____
6. Gary writes the important concepts from a biology chapter. ____

ANSWER KEYS

Page 9.

1.	"Mary"	NO
2.	"Betty"	NO
3.	"Sue"	YES
4.	"John"	YES
5.	"Sam"	NO
6.	"David"	NO
7.	"Shirley"	YES

1.	"Bob"	vocab. words
2.	"Angie"	talks out
3.	"Nancy"	spelling words
4.	"Cathy"	letters
5.	"David"	Science facts
6.	"Jennifer"	sponge grasps

Page 12.

1. see-write multiplication facts
2. see-say HM words
3. hear-write weekly spelling words
4. guide-do (tie shoe)
5. feel-say letter sounds
6. think-writes biology concepts

Learning statements are helpful in making each pinpointed skill more observable. By writing a student's objectives as learning statements, a teacher can be more aware of the learning channels being used for each skill. If a student does not improve on certain skills just a change in the learning channels would possibly improve performance. For example, a change could be made from see-write facts to see-say facts.

The Precision Teaching Reading and Math Basic Skills Curriculum is written in learning statements. The following examples are taken from several strands in the curriculum.

Reading	Math
see-say consonant and vowels	see-write addition facts 0-18
see-say vowels	see-write addition facts 0-9
see-say consonants	

These learning statements are clear, concise and can be very beneficial to the teacher in writing IEP's.

Specific practice sheets have been designed to measure the proficiency of most skills located in the Precision Teaching Basic Skills Curriculum. The Mixed Mastery practice sheet is a compilation of all the skills in a strand and can be used to measure proficiency of mixed skills. For example, on page 16 the Mixed Mastery sheet for Addition has a random sample of all the skills for that strand. This practice sheet can also be very useful as a pre-assessment which can assist the teacher in pinpointing the skills a student may lack.

Many teachers have found that choosing larger "chunks" of skills as pinpoints is beneficial to a student's overall progress. For example, a teacher may find that a student does not know any addition facts but instead of going back to Sums 0-5, it may be advantageous to begin with Sums 0-18. The student may need more instruction or practice with this skill but the teacher may save valuable time by not taking the student through the several smaller steps to reach 0-18.

Another excellent example of "chunking" is a teacher who chooses to teach a list of 25 Functional Words rather than breaking the list into groups of five words each. This teacher may find that her students will learn the whole list faster with just a little instruction and extra practice. Therefore, breaking a skill into smaller parts is not always the most effective method of teaching. It may be advantageous to first guide students through a curriculum in larger steps. If necessary the skills can be "broken down" into smaller segments if there is no progress.

A-21

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

(multi-digit, no reg. & reg.)

74 +13	38 + 0	233 + 3	123 + 45	456 266 254 +168	58 +62	186 + 5	48 + 8	648 + 25	25
219 + 3	9765 +1703	4321 +2348	746 +221	513 +191	943 +164	51 + 8	121 323 120 + 202	35 +47	54
415 + 4	262 425 366 234	29 + 8	372 +162	756 + 23	8872 +1162	2865 3739 + 4620	778 + 8	18 + 9	83
15 + 9	721 + 8	8606 +2642	4787 8293	47 +58	9173 +1898	219 +382	446 + 25	15 + 4	114
6180 +2719	97 +36	754 +849	880 + 20	35 +22	964 + 6	3865 5738 +2620	7064 + 424	666 + 41	145

16

COUNTING AND RECORDING

After a behavior has been chosen to count, the next step is to decide upon the counting period. The unit of measure used in Precision Teaching is "FREQUENCY per minute."

FREQUENCY is the number of behaviors occurring during a specified time period.

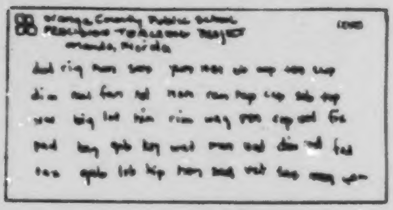
$$\text{FREQUENCY} = \frac{\text{count of behaviors}}{\text{\# of minutes}}$$

which yields

COUNT PER MINUTE

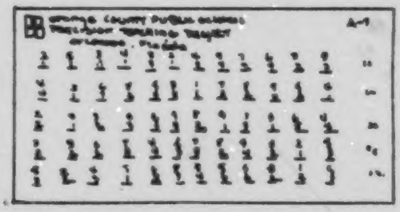
One minute is used most often as a counting period for academic behaviors. It is a quick and efficient measure of the student's behavior and a reliable picture of what the student can do. For social behaviors the counting period chosen will depend on how often the behavior occurs. For example, if the student is talking out during math class, the teacher may only count the talk-outs during a 45 minute period. For each selected pinpoint, both correct and incorrect, or positive and negative responses need to be counted. This is known as a "FAIR PAIR."

The next step is RECORDING.



READING

Pretend that the CVC (consonant-vowel-consonant) practice sheet has been chosen for the student's reading pinpoint. The student will read the words from the sheet and the checker will follow along with another copy. To save paper, it is a good idea for the checker's copy to have some type of acetate cover. "Please Begin" is a good signal for starting the student and "Thank You" is a good signal for stopping the student. As the student reads the words, the incorrect responses should be marked. Self-corrected words are counted as errors. (See page 19 for more specific directions on checking.) Subtract the incorrect responses from the total words read to get the number of correct responses. Record the number correct and incorrect words read.



MATH

Pretend that a multiplication facts practice sheet has been chosen for a math pinpoint. The students may write directly on the sheets or on the acetate covers. The same signals should be used for this timing. After one minute check correct and incorrect responses (in most cases the students will use an Answer Key to check their own sheets). When checking math always count each digit as a separate response. (See page 20 for more specific directions on checking.) Record the number of correct and incorrect digits written.

ORANGE COUNTY PUBLIC SCHOOLS
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ORLANDO, FLORIDA

see-say

CVC

PA-4

nap	tip	leg	tin	fix	map	cub	fan	cut	vet	10
mom	sip	dim	web	rig	bed	dug	keg	pop	yum	20
yam	cap	hip	bun	yes	hot	mum	fib	hug	fat	30
sun	sit	bob	fiz	rag	sob	rod	zip	lug	pen	40
zap	tax	pet	cop	tot	hid	rag	him	run	hum	50
rut	web	men					rut	hen	cub	60
bed	hip	hen					fat	liz	rod	70
rod	run	hug					hot	yum	sob	80
hid	rig	hum					zap	tin	fiz	90
bun	cut	fan	fix	fib	wig	mom	pop	sip	bob	100
pet	keg	zip	pen	tot	yes	nap	leg	him	men	110
yum	fan	mum	hip	fiz	pet	mom	bob	zip	sip	120
dim	web	yam	rig	bed	dug	keg	pop	yum	wig	130

When correcting a reading practice sheet, mark the words that are read incorrectly. At the end of one minute, draw a stop line. Subtract the incorrect from the total words read to get the number of correct responses. The cumulative count on the side can expedite the checking process. On this sheet the count is 28 correct, 6 incorrect (28/6). The next day the student can begin the sheet after the stop line or back at the beginning of the page. Another alternative is to have the student begin on a different row each day.

OCPS

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M-9M

see-write

36/6

(Mastery-probe)

7	5	1	9	6	6	7	2	7	5	6	7	0	9	3	8	
x6	x7	x9	x8	x5	x3	x9	x4	x3	x3	x3	x4	x8	x5	x9	x6	
42		9	72	30	18	63	8	12	15	18	27	8	45		48	29
6	4	9	5	3	3	4	8	2	9	8	5	8	9	8	7	
x9	x3	x2	x5	x2	x8	x4	x7	x5	x1	x8	x8	x6	x4	x1	x8	
54	12	18	10	6	24	16	56	10								58
7	3	9	7								5	9	5	8	3	
x2	x1	x3	x7								x9	x9	x2	x9	x3	87
1	3	4	2								5	7	9	6	6	
x4	x6	x7	x3								x6	x5	x7	x6	x7	115
2	5	3	9	3	8	8	4	4	2	3	2	8	6	4	2	
x8	x4	x9	x7	x5	x2	x3	x6	x2	x9	x7	x7	x5	x4	x0	x2	144

When correcting a math practice sheet, each digit is counted as an answer. A stop line should be drawn where the student finishes. Incorrect digits are marked and subtracted from the total number of digits to get the number of correct digits. The cumulative count on the side can expedite the checking. On this sheet the count is 36 correct, 6 incorrect (36/6). The next day the student can begin the sheet after the stop line or back at the beginning if acetates are used. Students can also begin on a different row each day.

20

SA-9

OCPS

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see-write

Suffix Meanings*

Write in the suffix that completes the word for each sentence.

ment ion ship ful y en less able ous th ly ness

The little girl had to take a spoonful of the medicine. The watch dog will not bite you, he is harmful 7
Mary took her car to the garage for inspection. The flashlight brightened the darkess She walked 14
softly so she would not wake the baby. The joke was very humoros. He was going to the doctor for 19
treatment She wanted to straighten her curly hair. Sue is very friendly, she is likeble. The 29
woman had not slept well, she was sleepy. The two children had a strong friendsihp David was in 34
the fourth grade. The winding road was very dangerous. The lost puppy was homeless The china 41
dish was breakble Patti gladly went to the store for her mother. Her toothache was very painful. 48
21 The shipment arrived on air freight. The select____ of dresses at the shop was very good. The couple 55
celebrated their ten____ anni She was granted member____ in 61
the club. We thanked her (____ the room. The baby 69
missed its nap and was crank_ Bob was nerv____ about the 75
final exam. All of the ei owned a car dealer____. 78
Soon after the concrete is po el____ by the other children. 81
The teacher expected perfect_ or all of his birthday gifts. 87
There was much sad____ among the family when their pet ran away. In space the astronauts are weight____. 95
The family gets a lot of enjoy____ out of doing things together. His college graduation was a joy____ 102
occasion. That material is wash____. My mother puts bleach in the wash to bright____ the clothes. 108

When correcting a practice sheet that requires spelling, each letter is counted as an answer. Each letter written in correct order is counted as a correct answer. Any omissions are counted as incorrect. Subtract incorrect from correct to get the number of correct responses. On this sheet the count is 43 correct and 9 incorrect (43/9).

It is a good idea if teachers and students will look at errors as "Learning Opportunities." Students need to be encouraged not to be afraid to make errors and to look at errors as opportunities to learn. With practice, high errors usually drop to a low frequency within a short period of time. There will be more dramatic learning if there are errors at the beginning. Errors can provide a challenge for the students!

With many students it is best to encourage "skips" when they first begin a timing. Fluency is harder to attain when students hesitate to pause over problems or words they do not know. It is up to each individual teacher whether the "skips" count against the students. A good suggestion is to not count the "skips" as errors when a student first begins. If the "skips" do not decrease over a short period of time the teacher may want to count them as errors. Remember, "skips" still signal to the teacher which problems or words need extra attention.

Timings alone will not guarantee that students will increase their learning. Many opportunities for instruction and practice must be provided for with the skill that has been chosen for a PINPOINT.

The next important element of the pinpointed skill is TOOL SKILLS. All skills have basic skills that are a necessary part in performing the original skill more proficiently. Working with these tool skills is beneficial to a student's overall progress.

For each pinpoint an appropriate tool skill needs to be chosen. For example, if the teacher has pinpointed addition facts for the student to work on, it is very important that the student has the tool skill of writing numbers at a fast rate. If the student is unable to write numbers at a fast rate he/she will be unable to perform computational skills at a fast rate. The tool skill of writing numbers can be measured by giving the student a one minute timing of writing digits 0-9 repeatedly. Count the number of digits written. (See page 25)

For a reading pinpoint a good tool skill would be to say the alphabet or easy words. This tool skill aids the student in saying higher level words at a fast rate. The teacher can ask the student to say the alphabet from memory or look and say the alphabet repeatedly for one minute. A quick way to find the correct count is to muitiply the number of times the alphabet was completed by twenty-six (the number of letters in the alphabet). Also, be sure to add any extra letters that were said.

There are proficiency aims for TOOL SKILLS (see Suggested Performance Standards page 28) and it's important that timings be continued each day on TOOL SKILLS until proficiency is reached. Every student may not be able to reach the Suggested Performance Standards on Tool Skills, but opportunities should be given to each student to reach the highest aim possible on individual tool skills.

TOOL SKILLS

are . . .

basic skills that are necessary to perform the original skill.

Here are a few examples of tool skills for academic skills:*

Math

Think - write digits (0-9)

Think - say counting forward (1-10, 1-20) Addition

Think - say counting backwards (10-1, 20-1) Subtraction

Think - say count by's (1's-9's) Multiplication

Reading

Think - say alphabet

See - say alphabet

Think - say basic vocabulary words

Think - say phonetic sounds

Writing

See - write slashes

Think - write slashes

See - write circles

Think - write circles

See write alphabet

Think - write alphabet

*Adapted from Precision Teaching Project Training Manual, Great Falls Public Schools, Great Falls, Montana

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0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4					

A GOOD AIM IS 120 - 140 DIGITS IN ONE MINUTE.

95/0

TELL STUDENTS THAT NUMBERS NEED TO BE WRITTEN QUICKLY BUT LEGIBLY. STRESS THAT PERFECT FORMATION IS NOT IMPORTANT AS LONG AS THE NUMBERS CAN BE READ.

SETTING AIMS

It is important that teachers help students reach a proficiency level on each skill that is pinpointed. If proficiency is reached it is believed that maintenance of the skill is assured. We need to "expect the best" of each student and assist each one in reaching their highest potential.

Therefore, it is advantageous to set individual AIMS for each skill pinpointed. An AIM is an ending goal usually expressed as a specific frequency range, for example, 70-90 correct with 2 or less errors would be an excellent aim for math facts. Setting aims in ranges allows for individual differences. There will be students who reach the lower frequency aim and there are others who will reach the middle and high range. It is wise to set an accuracy measure -- 2 errors or less is considered a good standard accuracy for most skills.

Some teachers may feel that many of the standards written in this manual seem too high for students to reach. High frequencies are recommended so students will have better retention of skills. Do not be satisfied with lower frequencies. Give students every opportunity to grow and reach a high aim.

Many students benefit from the teacher setting daily or weekly aims. Other students may enjoy the teacher setting the final aim with the date it should be met. The most important tactic to remember is to look at students individually when setting AIMS. The following page should be helpful to the teacher in setting aims.

*Several ways to set AIMS is to use . . .

1. The Suggested Performance Standards (see page 28)
2. Grade Level Information
    a. Based on frequencies typically reached in the past,

       or

    b. Based on the median performance for this particular group of students.
3. The Individual Student's Motor Tool Skill Frequency
    a. Assess tool skill for approximately two weeks.
    b. Apply the following formula: 1/2 to 2/3 of tool skill frequency = reasonable aim for a related basic skill. For example, if a student's tool skill of writing numbers 0-9 is 100 then a good aim for basic facts would be 65.
    c. Raise the aim, as necessary, throughout the year.
4. Functional Frequencies
    a. Ideally, locate nine "experts" - people whom you would assume are proficient at the skill,

       or

    b. Use yourself and/or several other teachers.
    c. Perform the timed task twice
        1) Use the first timing as a warm-up.
        2) Use the median score of the group as an aim.

*Adapted from Precision Teaching Project Training Manual Great Falls Public Schools, Great Falls, Montana.

SUGGESTED PERFORMANCE STANDARDS*

PINPOINT	STANDARD
READING	
See/Say Isolated Sounds	60-80 sounds/min.
See/Say Phonetic Words	60-80 words/min.
Think/Say Alphabet (forward or backward)	400+ letters/min.
See/Say Letter Names	80-100 letters/min.
See/Say Sight Words	80-100 words/min.
See/Say Words in Context (oral reading)	200+ words/min.
See/Say Words in Context (silent reading)	400+ words/min.
Think/Say Ideas or Facts	15-30 ideas/min.
HANDWRITING	
Emphasizing Speed	
See/Write Slashes	200-400 slashes/min.
See/Write Circles	100-150 circles/min.
Think/Write Alphabet	80-100 letters/min.
Emphasizing Accuracy	
See/Write letters (count of 3 for each letter: slant, form and ending)	75 correct/min.
See/Write - Cursive letters connected (count of 3 per letter)	125 correct/min.
SPELLING	
Hear/Write Dictated Words	80-100 letters/min.
Hear/Write Dictated Words	15-25 words/min.
MATH	
See/Write Numbers Random	100-120 digits/min.
Think/Write Numbers (0-9 serial)	120-160 digits/min.
See/Say Numbers	80-100/min.
Think/Say Numbers in Sequence (count by's)	150-200+/min.
See/Write Math Facts	70-90 digits/min.

*Adapted from Great Falls Precision Teaching Project Training Manual, Great Falls Public Schools, Great Falls, Montana.

CHARTING

WHY DO WE NEED TO CHART?

Charting is promoted because it gives the teacher and students a visual picture of how the student is learning . The chart aids the teacher in making more precise decisions about the student's learning. If the student is not learning or improving the chart signals that difficulty right away. There is no guesswork involved. Precision Teaching should not be used without the charting. Take the time to teach students to chart. See "Teaching Students to Chart," pages 34-37. Students accept the chart readily and usually learn very quickly how to use it.

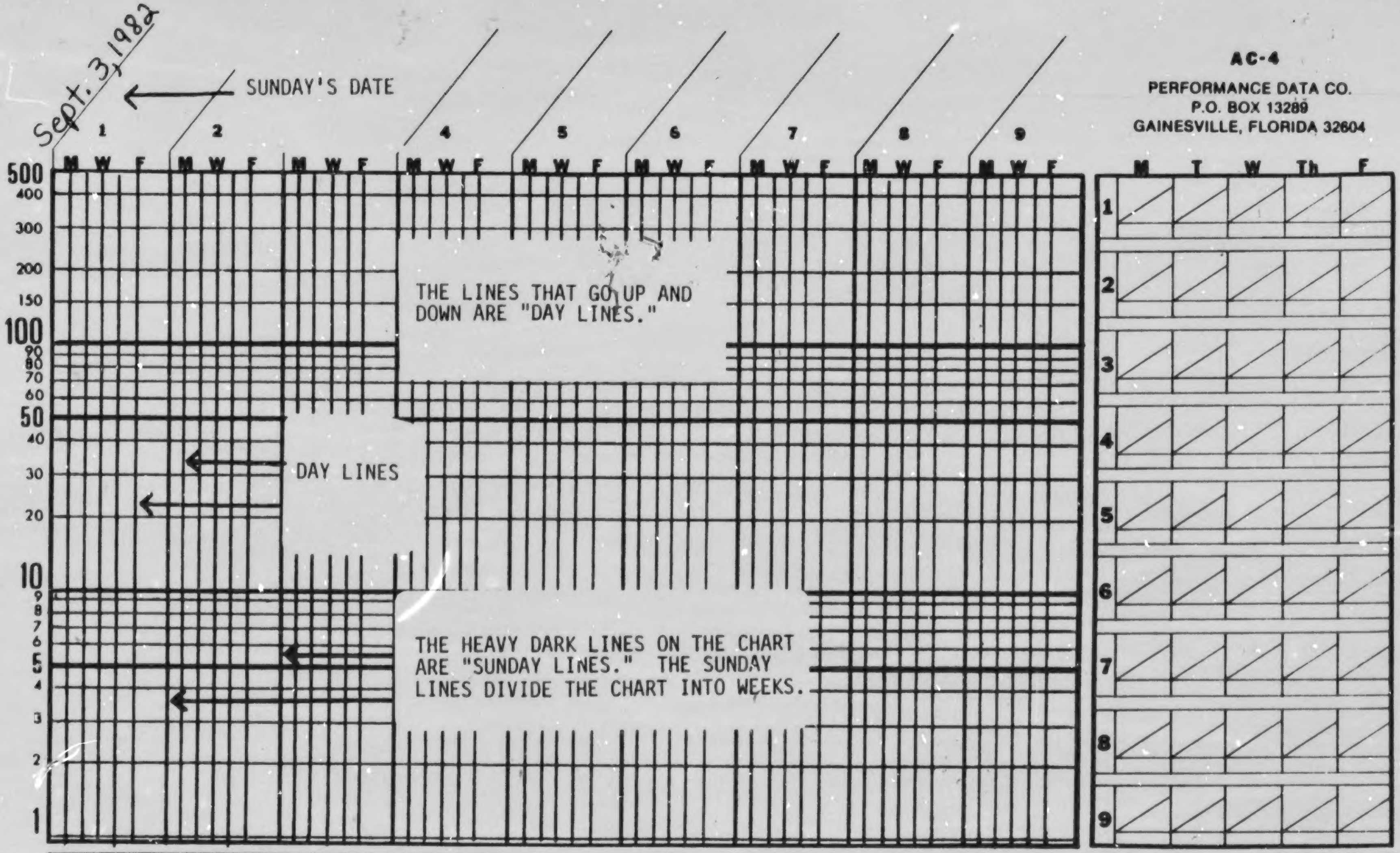
WHY DO WE NEED TO USE THAT FUNNY LOOKING CHART?

The chart used for most one minute timings is the AC-4. This chart is a revision of the original Standard Behavior Chart developed by Ogden Lindsley. The Standard Behavior Chart should be used for academic or social behaviors that are counted for longer than one minute. Both charts are semi-logiarithm or multiply-divide charts. These charts reflect proportional change or growth. Students learn proportionately and not in equal intervals. Therefore, the semi-logarithm charts depict learning more accurately.

The charts used in this manual are copied from the original AC-4 with the permission of the author. Teachers should use the original charts with their students and can order them from the address below:

Academic Behavior Chart
AC-4, Irm. - $25.00
Performance Data Co.
P.O. Box 13289
Gainesville, Florida 32604

For more information on using the Standard Behavior Chart a good source is Koorland and Martin, Elementary Principles and Procedures of the Standard Behavior Chart, Learning Environments, Inc., Gainesville, Florida, 1975.



Sept. 3, 1982

SUNDAY'S DATE

THE LINES THAT GO UP AND DOWN ARE "DAY LINES."

DAY LINES

THE HEAVY DARK LINES ON THE CHART ARE "SUNDAY LINES." THE SUNDAY LINES DIVIDE THE CHART INTO WEEKS.

AC-4

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NAME ______________________ **GRADE** ____________

BEHAVIOR ______________________ **GOAL** ____________

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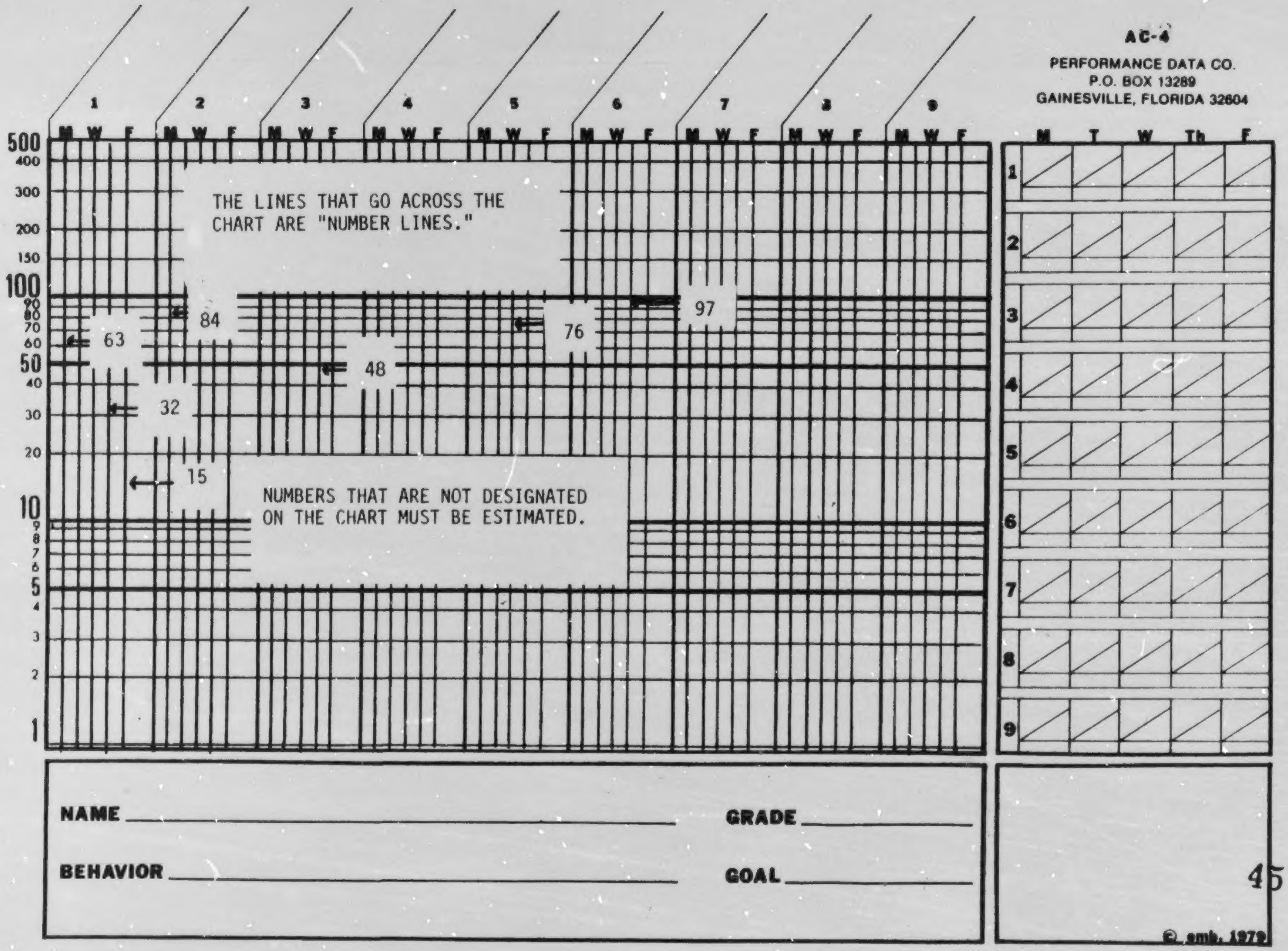

THE LINES THAT GO ACROSS THE CHART ARE "NUMBER LINES."

NUMBERS THAT ARE NOT DESIGNATED ON THE CHART MUST BE ESTIMATED.

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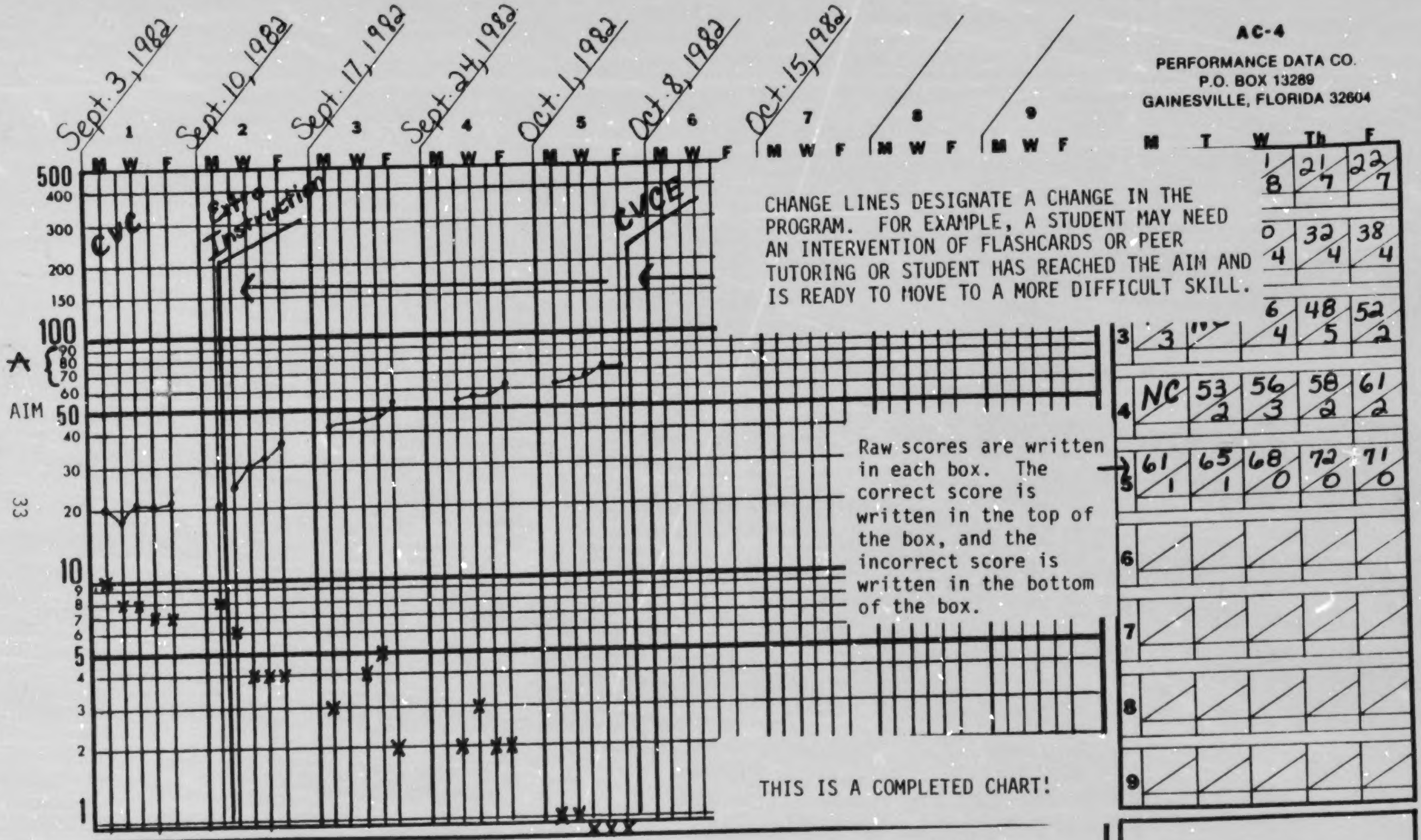

CHANGE LINES DESIGNATE A CHANGE IN THE PROGRAM. FOR EXAMPLE, A STUDENT MAY NEED AN INTERVENTION OF FLASHCARDS OR PEER TUTORING OR STUDENT HAS REACHED THE AIM AND IS READY TO MOVE TO A MORE DIFFICULT SKILL.

Raw scores are written in each box. The correct score is written in the top of the box, and the incorrect score is written in the bottom of the box.

THIS IS A COMPLETED CHART!

	M	T	W	Th	F
1			1 8	21 7	22 7
2			0 4	32 4	38 4
3	3	[illegible]	6 4	48 5	52 2
4	NC	53 2	56 3	58 2	61 2
5	61 1	65 1	68 0	72 0	71 0
6					
7					
8					
9					

NAME Sally Student **GRADE** 3rd

BEHAVIOR See-say phonetic words **GOAL** 70-90

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TEACHING STUDENTS TO CHART

When introducing the chart to students the following lessons will aid the teacher in giving a clear and simple description of charting procedures. Use a transparency of the chart or a chart sketched on the chalkboard as the visual aid. Repeat these lessons daily for several days to ensure that students are comfortable with the chart. When the students have become proficient at charting their daily scores, charts should be reviewed weekly in order to make effective data decisions.

Lesson 1

Look at chart

Say: *Day lines go up and down on the chart. What are the lines that go up and down?* (Repeat this question several times.)

Say: *The heavy dark lines that go up and down are Sunday lines. What are the heavy dark lines that go up and down?* (Repeat.)

Say: *The Sunday lines divide the charts into weeks. Count the weeks on the chart: 1, 2....9. How many weeks are there?*

Point to the slanted line above the Sunday line.

Say: *This is where we put the Sunday date. Sunday is the first day of the week, so we put the Sunday date for the weekly date.*

Say: *The lines that go across the chart are number lines. What do we call the lines that go across the chart?* (Repeat.)

Say: *Find the number lines for 1, 2.....10, 20, 30, 40, 50....100, 200, etc.* Students can point to the number lines as teacher calls out the number. The teacher needs to monitor correct responses by walking around and checking students.

Demonstrate several easy examples to chart raw score.

Say: *Next we write our score in the box on the right side of the chart.* Point to the first row of boxes with the "1" beside it. Point to the box with an "M" above it. *This is the Monday box and this is where we write our score for Monday. The correct score goes in the top of the box and the incorrect score goes in the bottom of the box.* Point out each box and the day of the week that goes with it. (T, W, Th, F)

Say: *Now we are ready to chart our score. Find the week with the "1" above it.* Explain that this is Week One and it is the week we begin to chart on first. Demonstrate as you explain.

Say: *Look at the correct score. It is 5, so we go up the number line to 5 then across to the Monday day line. We put a • on the day line for correct. Now look at the incorrect score. It is 4 so we go up the number line to 4 then across to the Monday day line. We put an X on the day line for incorrect. Don't make the • and the X too big or too small. Remember to put the • and the X on the day line.*

Say: *On the day when you do not do the timing due to absence or special activity, etc. skip that day on the chart. Write NC (no chance) in the score box for that day on the side of the chart.*

Make up scores for the rest of the week (T, W, Th, F) and use the same method to demonstrate charting these scores.

Demonstrate as you explain.

Say: *You can connect the •'s to •'s and the X's to X's for one week at a time. Do not draw lines through Sunday lines.*

Give the students several easy examples to chart on the "Charting Practice Sheet." No estimating yet!

Lesson 2

Review day lines, number lines, Sunday lines, Sunday date, no chance days. Review the simple charting procedure. Introduce the concept of "estimating."

Demonstrate as you explain.

Say: *What if we have a correct score of 21? We do not have a 21 number line. We have to estimate - that is guess as accurately as possible where that number line would be. Is 21 closer to the 20 or 30 number line? It is closer to the 20 number line so we put our pencil right above the 20 number line and go to the correct day line and put a • .*

Say: *What if our score is 28? Is it closer to the 20 or 30 number line? It is closer to the 30 number line so we put our pencil right below the 30 number line and go over to the correct day line and put a • .*

Have students use the "Charting Practice Sheet" to chart examples that require estimating up to the 50 number line.

Lesson 3

Review charting vocabulary with students. Introduce estimating with examples above 50. Use teaching method in Lesson 2. Since the distance between 50 and 60 is smaller on the chart, students need practice in estimating smaller distances. Give students the "Charting Practice Sheet" to chart examples that require estimating above the 50 number line.

Introduce Phase or Change Lines

Demonstrate as you explain.

Say: *Many times we make changes in our work. We can make a change by going on to a new practice sheet when we reach our aim or we can change our work because we may not be improving for several days. Any type of change needs to be noted on the chart.*

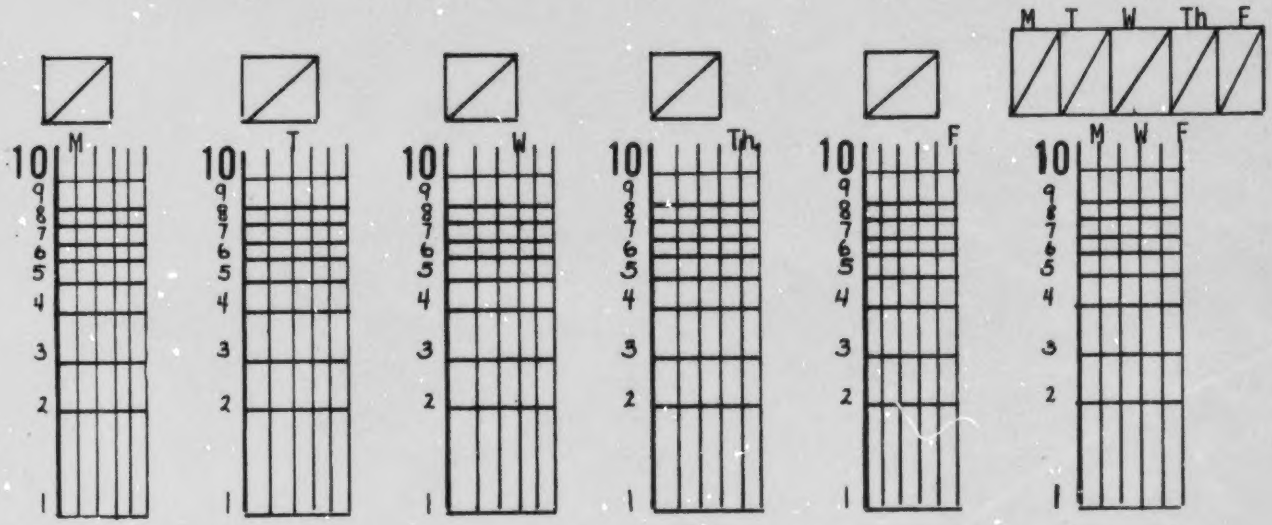
Say: *To make a change line on the chart we take a sharp pencil and a ruler and draw a line up and down and halfway between the day lines. If we reach our aim on Tuesday we draw a line halfway between the Tuesday and Wednesday day lines.*

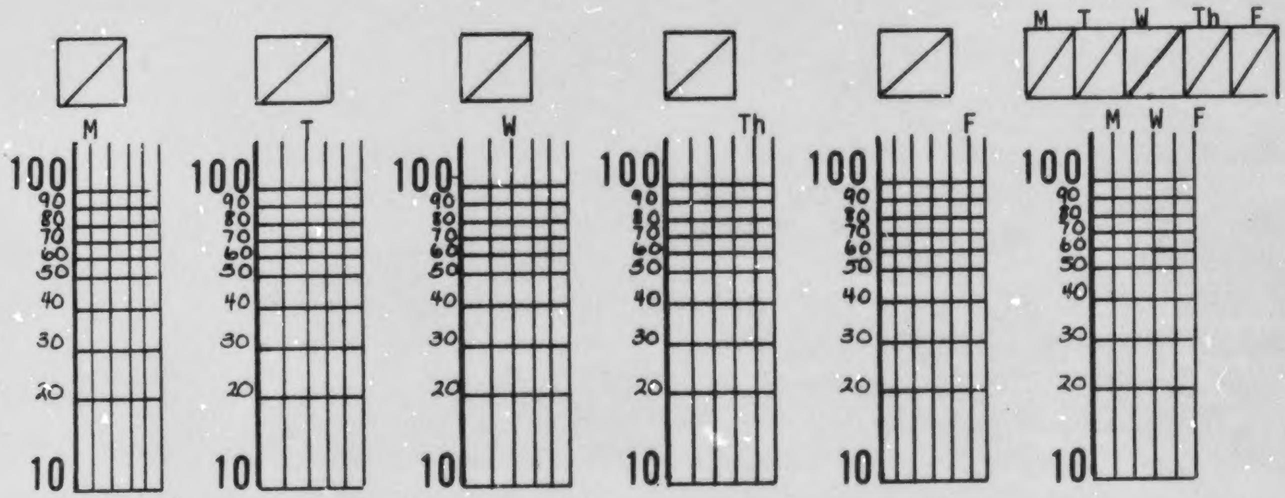
Say: *The change line is like a stop sign - it tells us to stop and go on to something else.*

Demonstrate how to label the change line with a short description of the change. Students may use different colors to draw change lines. Students may practice drawing change lines on the "Charting Practice Sheet." The students should now be ready to chart on the AC-4 Chart.

CHARTING PRACTICE SHEET

NAME ______________________________ DATE ____________________





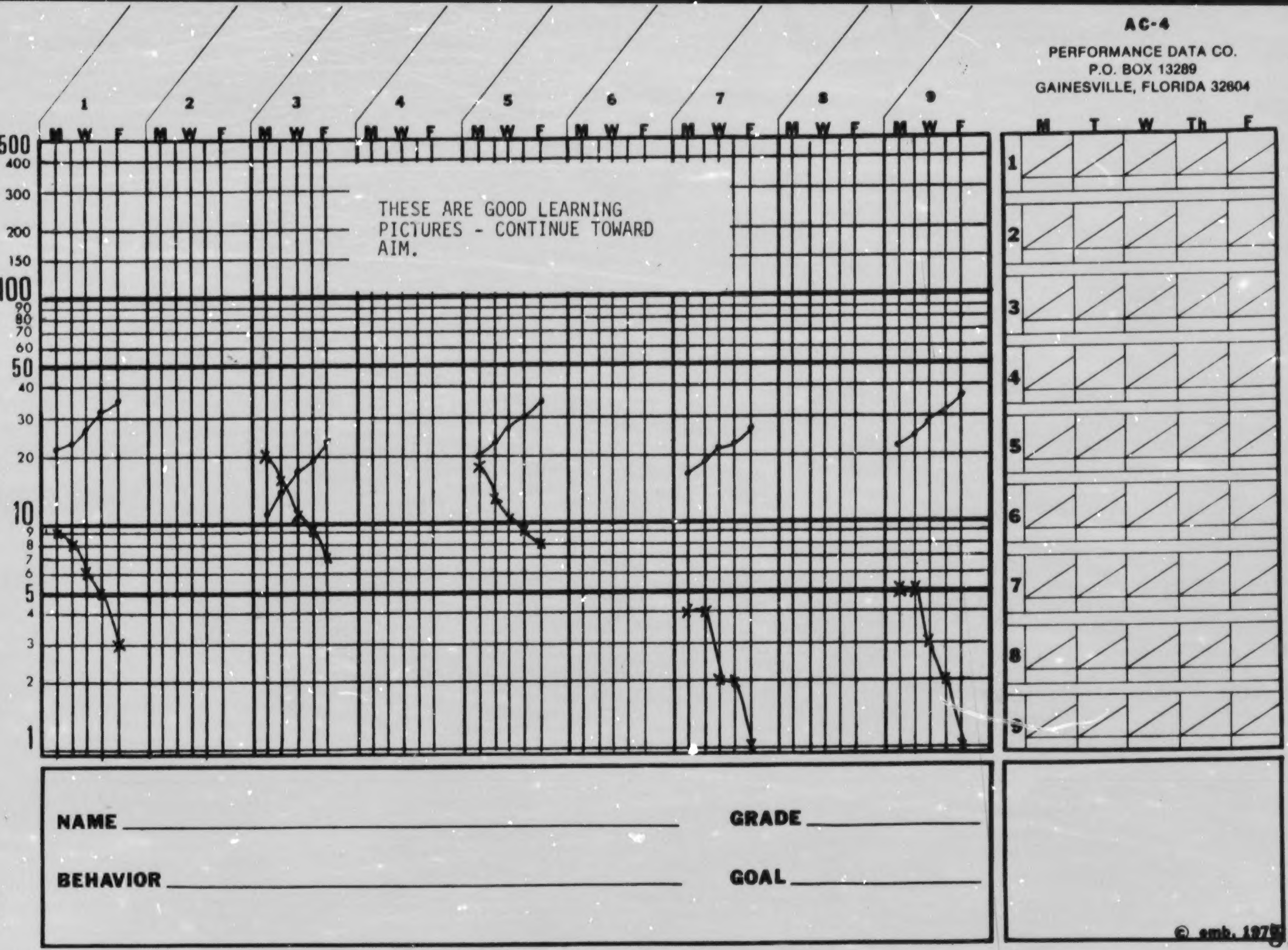
DECISION-MAKING

After charting several scores students will have a picture of their learning. Learning is a change in performance. If a student's chart shows a progressing change it can be assumed that he/she is learning. If the learning picture shows that no change or a negative change is occurring an intervention should be made.

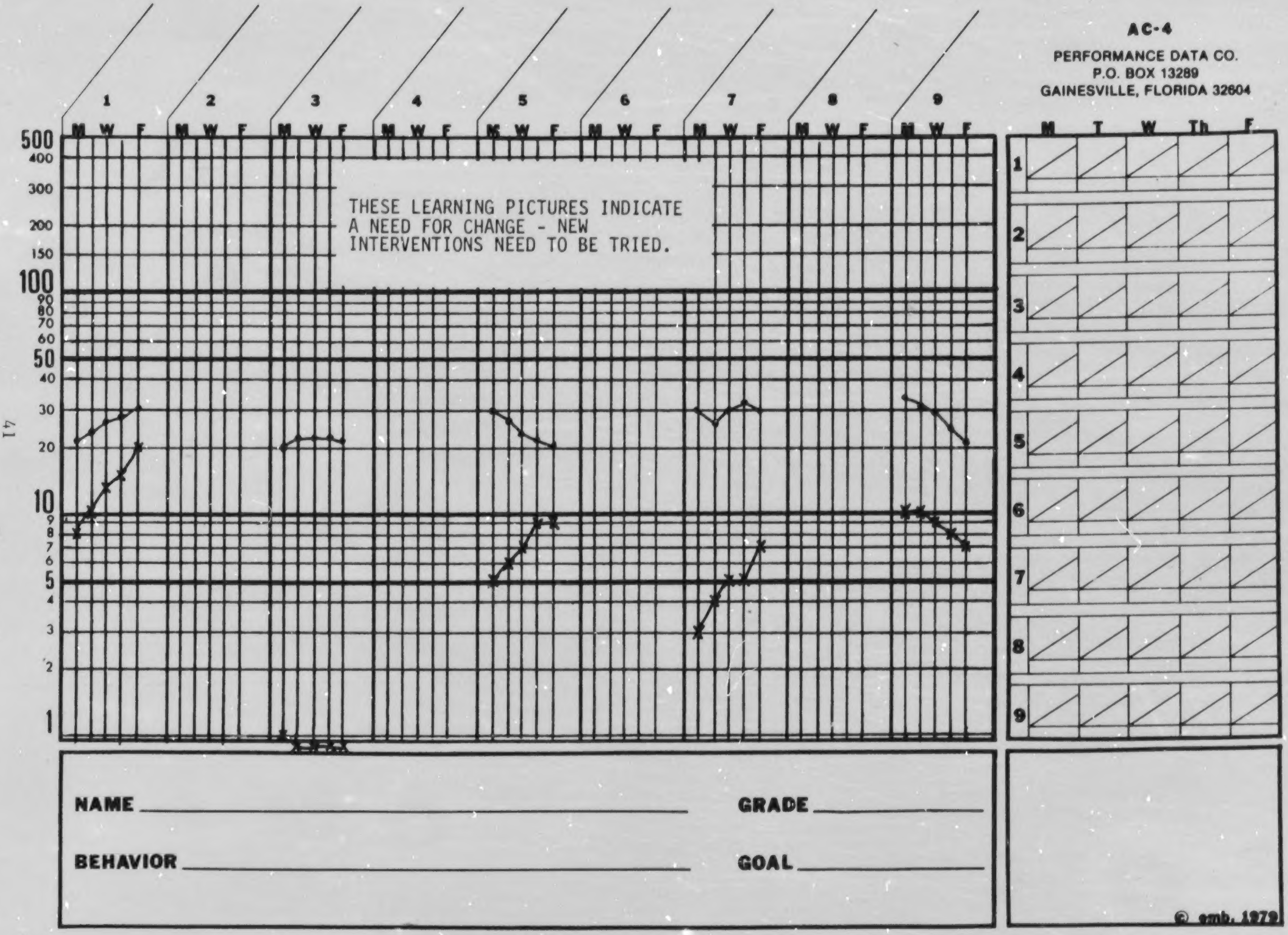
Some examples of curriculum interventions are:

Step - A step is a change in the skill that has been pinpointed. A step ahead can be made to a more difficult skill or a step back to a prerequisite skill. For example, if the student is working on reading CVC words and not improving, the teacher can make a step back to work on short vowel sounds or consonant sounds.

Slice - A slice is breaking the skill into component parts. For example, if the student is working on addition facts 0-18 and having difficulty, the teacher may want to slice back to sums 0-9 or 0-5.



THESE ARE GOOD LEARNING PICTURES - CONTINUE TOWARD AIM.



THESE LEARNING PICTURES INDICATE A NEED FOR CHANGE - NEW INTERVENTIONS NEED TO BE TRIED.

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NAME ______________________ **GRADE** __________

BEHAVIOR ______________________ **GOAL** __________

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To be better prepared in interpreting learning pictures it is necessary to look at the stages of skill development.

STAGES OF LEARNING

PROFICIENCY - Fluent level, high frequencies (Math = 60-90) (Reading - words in isolation = 70-90; passages = 200+)

FLUENCY BUILDING - Mastery level, very few errors, middle frequencies (Frequency = 30-50)

ACQUISITION - Attempt level, low frequency behavior usually higher error rate (Frequency = 1-20)

SKILL BUILDING TECHNIQUES*

There are many techniques to aid the teacher in improving student learning. It is beneficial to look at the charted data first and make decisions accordingly.

The following methods are a good guide for students who are in these learning stages:

ACQUISITION STAGE -	Direct instruction is desirable. Check on tool skills - Pairing tool skill timing with basic skill timing. Check to make sure learning channel is correct for student - Make change if needed. Provide answers for task at beginning of stage. Model for student (especially effective in reading). Instruction for errors, skips, omissions. Slice back - Step back. Contingency management.
FLUENCY BUILDING STAGE -	Provide practice: flashcards, think-write tasks, tape recorder, games, board work, etc. Model for student (especially effective in reading). Pacing practice - use metronome. Untimed practice. Contingency management.
PROFICIENCY STAGE (at aim for 2-3 days) -	Data flattens out: move on to a more difficult skill. Data still growing: allow data to continue to grow, raise aim. Move on to more difficult skill.

*Adapted from the Precision Teaching Project Training Manual, Great Falls Public Schools, Great Falls, Montana.

To get practice in basic decision-making read each example below and chart the data on the following page. After reviewing the data make decisions about each student's learning. Check your answers with the key on page 59.

Counting Behavior: See-write add facts (0-9) - Goal = 60-80

	Correct	Incorrect		Correct	Incorrect
Monday	33	7	Monday	56	3
Tuesday	42	6	Tuesday	57	2
Wednesday	48	4	Wednesday	56	2
Friday	53	3	Thursday	55	1

Counting Behavior: See-say Dolch words - Goal = 70-90

	Correct	Incorrect		Correct	Incorrect
Monday	12	6	Monday	15	5
Tuesday	15	6	Tuesday	13	4
Thursday	13	5	Wednesday	14	5
Friday	14	4			

Counting Behavior: See-say CVC words - Goal = 60-80

	Correct	Incorrect		Correct	Incorrect
Monday	42	7	Monday	63	2
Tuesday	48	4	Tuesday	66	1
Wednesday	55	5	Wednesday	72	0
Thursday	59	3	Thursday	76	0

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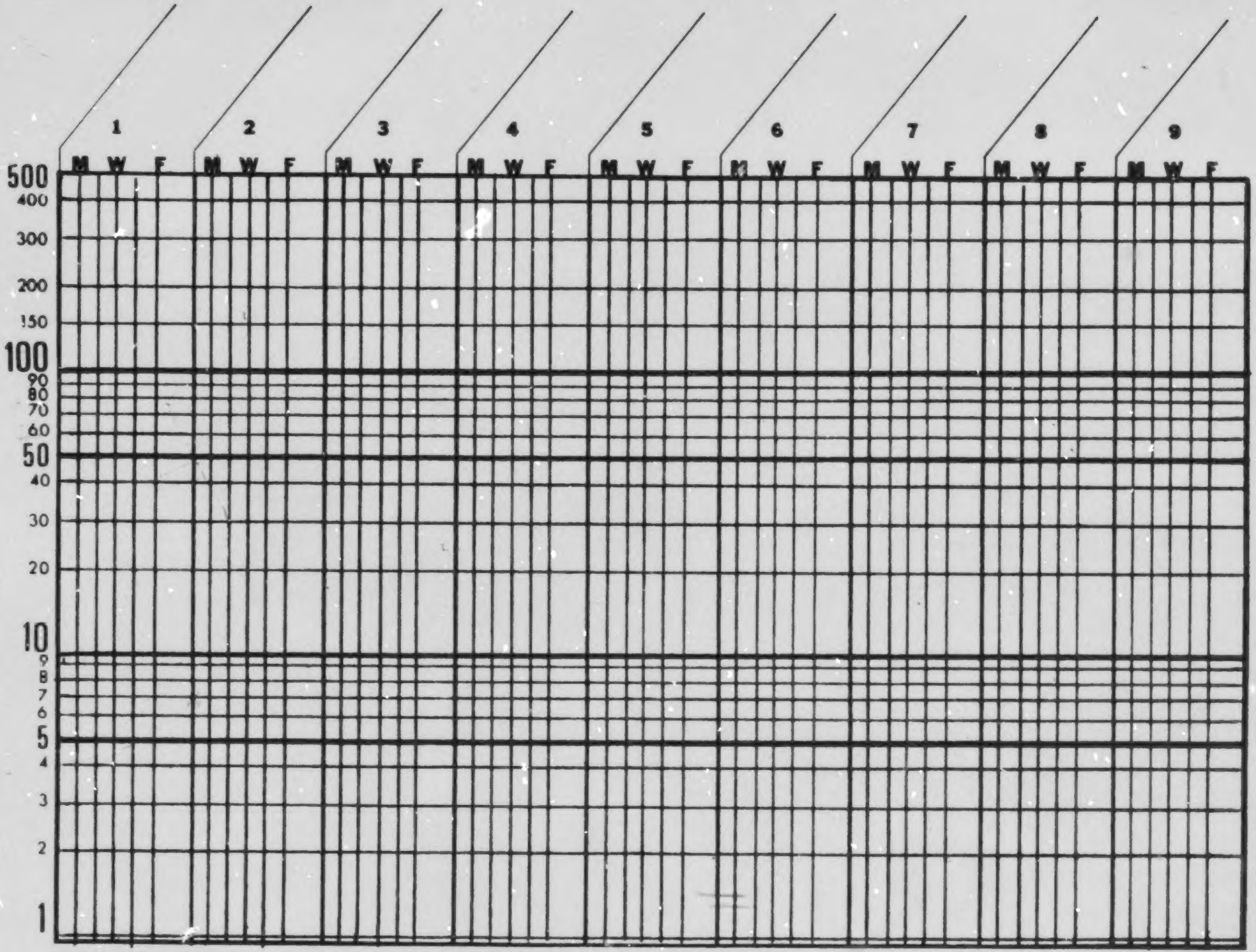

	M	T	W	Th	F
1					
2					
3					
4					
5					
6					
7					
8					
9					

NAME ______________________________ **GRADE** ______________

BEHAVIOR ______________________________ **GOAL** ______________

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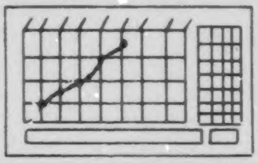
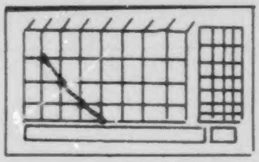
CELERATION

Celeration is a method of measurement that can be used to determine the trend in the student's learning. This behavior change can be computed by comparing the frequency of one day to a frequency exactly seven days later. If the end of the week frequency is greater than the beginning of the week frequency the behavior is increasing and it is a (X) celeration. If the end of the week frequency is smaller than the beginning of the week frequency the behavior is decreasing and it is a divide (÷) by celeration.

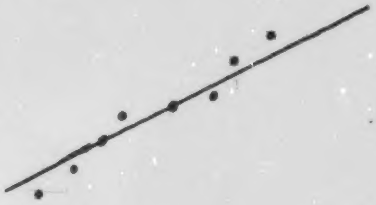
Acceleration - X Celeration



Deceleration - ÷ Celeration



Lines are drawn through the responses (•'s or x's) on the chart to reflect visually the slope and direction of the change. These lines can be drawn for a period longer than one week. There are several methods for drawing celeration lines. The "Freehand Method" is just a matter of drawing a line that will split the responses (•'s or x's) in half so there are an equal number of •'s or x's above and below the line.



The "Split Middle" Technique is more complicated and needs detailed instruction. Read the following outline and use the illustrations on pages 48-49 to learn this technique.

The "Quickie" or "Split-Middle" Technique for Estimating the Celeration Line*

1. Divide the data into two equal parts. These parts will be called the "first-half" and "second-half." The same number of dots should be on each half.
2. Find the middle day for the "first-half" and "second-half." Draw a vertical line through these "mid-days."
3. Find the middle rates for the first and second halves (i.e., rank scores on both halves and find the median score for each half). Draw a horizontal line through each mid-rate in the "first-half" and "second-half."
4. Draw a line from the intersection of the mid-day and mid-rate of the "first-half" to the intersection of the mid-day and mid-rate of the "second-half."
5. Count the number of data points falling above and below the line. If there are the same number above or below then you are finished. You may have to adjust the line (by moving it up or down) until there are the same amount of dots above and below.

NOTE: It is not always possible to get a perfect split because more than one data point may fall on the celeration line. Just try and get as even a split as possible.

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*Adapted from White and Haring, Exceptional Teaching, Charles Merrill Publishing Company.

AC-4

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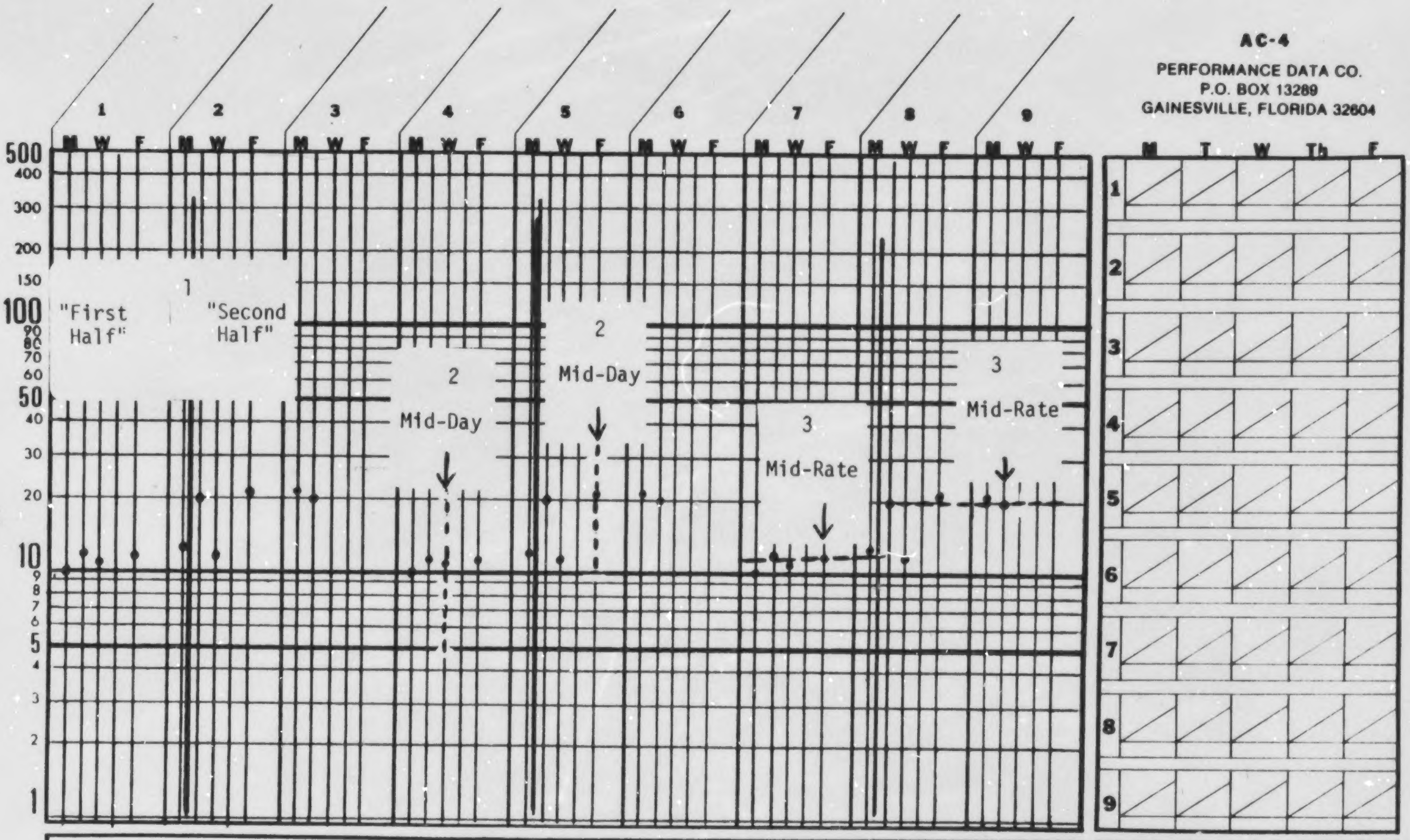

NAME ______________________ **GRADE** __________

BEHAVIOR ______________________ **GOAL** __________

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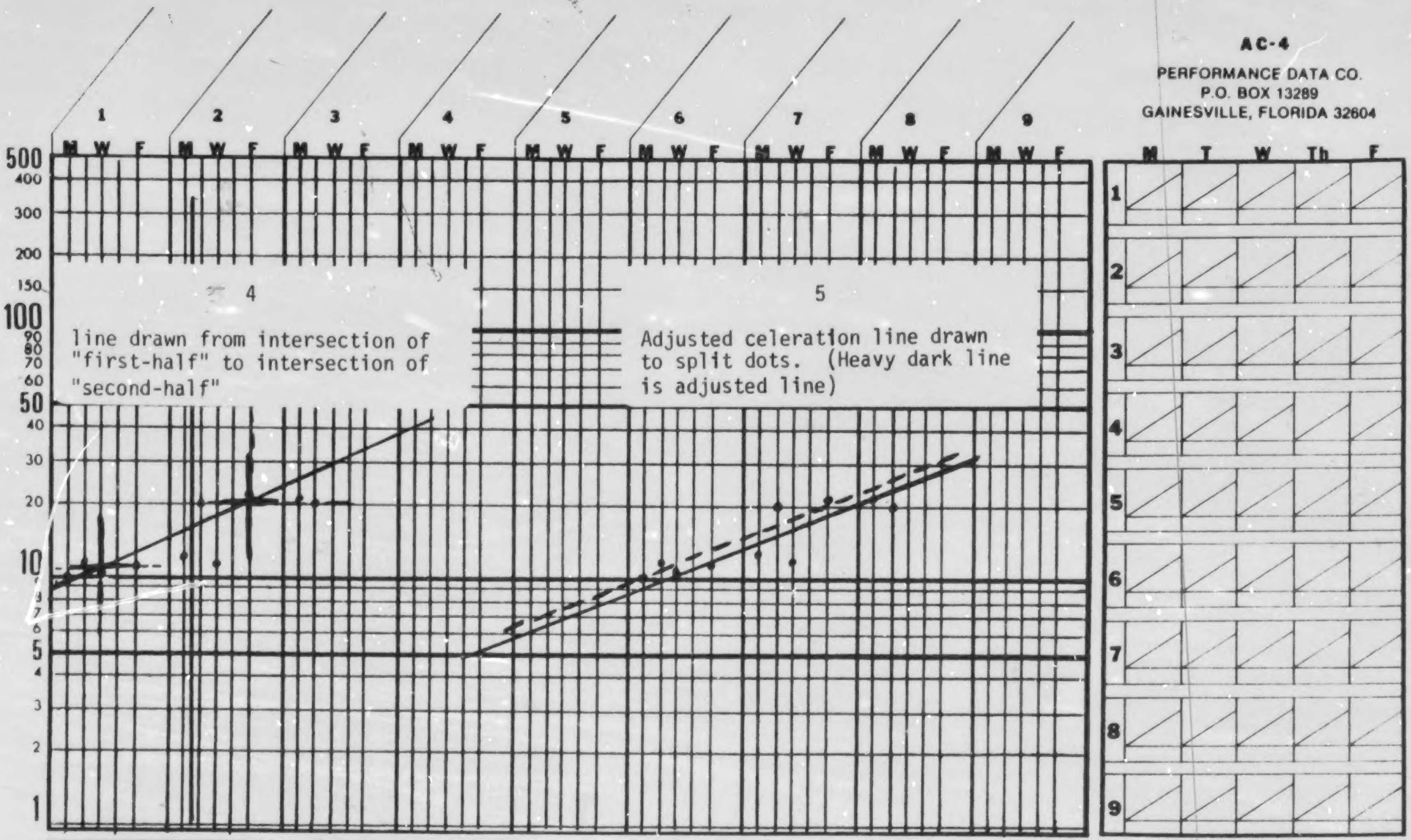

4

line drawn from intersection of "first-half" to intersection of "second-half"

5

Adjusted celeration line drawn to split dots. (Heavy dark line is adjusted line)

NAME ____________________ **GRADE** ____________

BEHAVIOR ____________________ **GOAL** ____________

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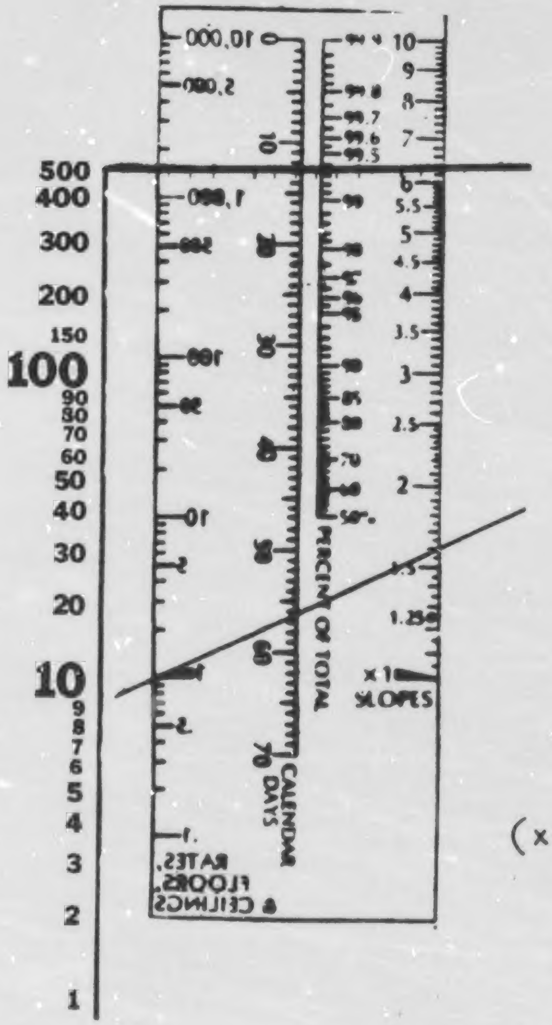
After celeration lines have been drawn the value of the line needs to be designated. Since the scale of the chart is an equal ratio chart the celeration values will be expressed as ratios such as ×1.8 or ×2 for acceleration. ÷2 or ÷3 are ratios for deceleration. If there is no change in the behavior the celeration is described as ×1.0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RATES, FLOORS, & CEILINGS
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20
30
40
50
60
70
CALENDAR DAYS
PERCENT OF TOTAL
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99.8
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×1
SLOPES

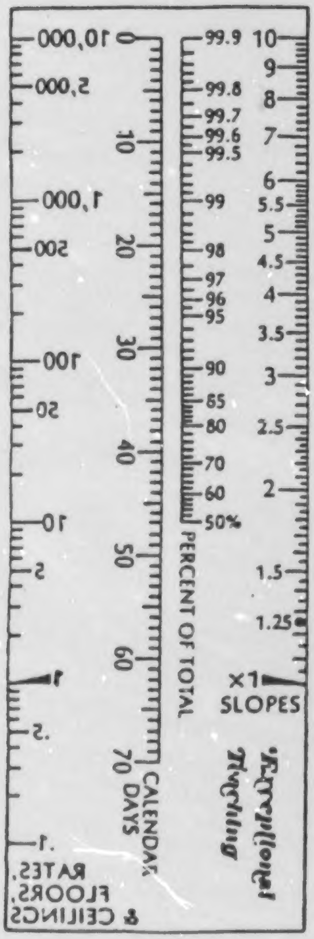
Using the Celeration Finder

A. Draw the learning line.
B. To determine celeration
   1. Place the finder on the chart so that the scale labled "slopes" is on the right-hand side of the finder.
   2. Line up the finder so it is straight up and down on the chart and on top of the line to be measured.
   3. Move the finder up or down (making sure it stays perfectly vertical on the chart) until the arrow on the left-hand side of the finder touches the line to be measured.
   4. Read the slope of the line by noting the point at which the line crosses the slopes scale of the finder.

(x1.6)

Adapted from White and Haring, Exceptional Teaching, Charles Merrill Publishing Company.

Celeration finders can be made by making a transparency of this page and cutting out the individual finders.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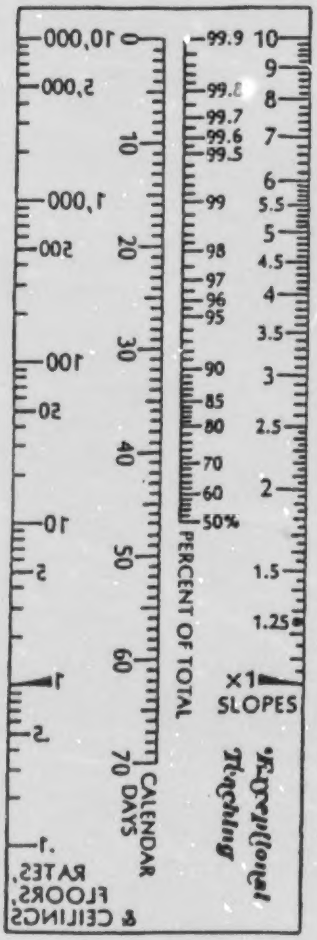
SLOPES
Exceptional Teaching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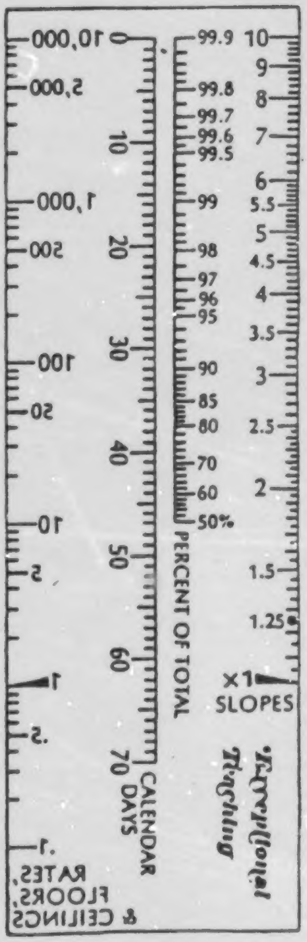
SLOPES
Exceptional Teaching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×1
SLOPES
Exceptional Teaching

If there is no frequency finder available the teacher can determine the value of the celeration line by using the raw data. Using two weeks of data:

A. Find median frequencies for each week (the middle score when scores are ranked ordered from smallest to largest).

   1. If there are an odd number of scores, use the middle score.

      Example: 3 7 12 10 11 Median = 10

   2. If there are an even number of scores, find the median by using the average of the two middle scores.

      Example: 3 7 11 9 Median = 8

B. Divide the smaller median into the larger median (carry out three decimal places and round-off to two).

C. Indicate with an (X) or (÷).

   1. If a smaller number occurs during the first week, indicate this with a (X) celeration.

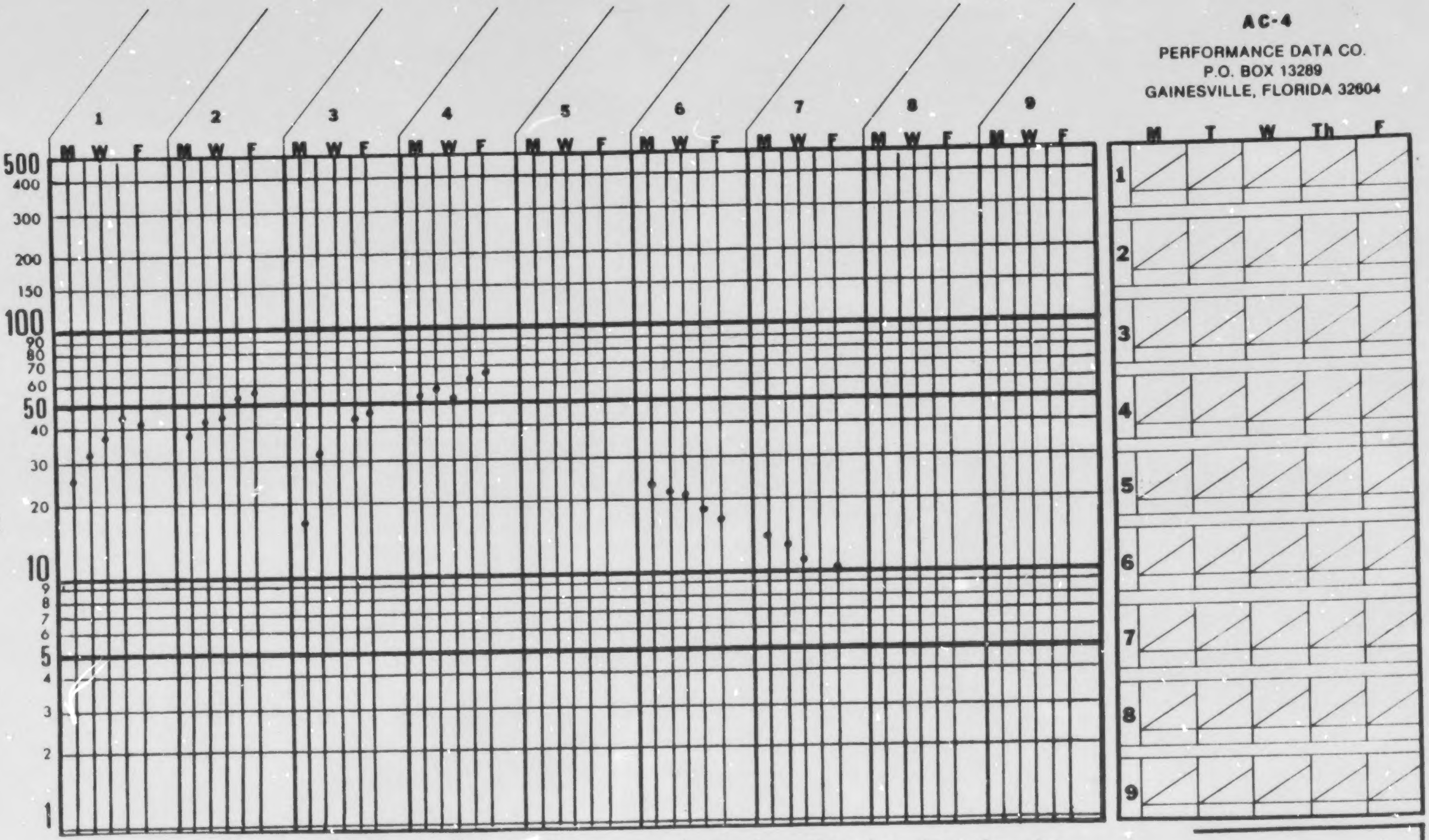
   2. If a smaller number occurs during the second week, indicate this with a (÷) celeration.

      Example: Step 1: Week One Median = 10
      Week Two Median = 15

      Step 2: $10\overline{)15.}$ = 1.50

      Step 3: X 1.50

*Adapted from the Precision Teaching Project Training Manual, Great Falls Public Schools, Great Falls, Montana.



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Use the "Split Middle" Technique to draw the celeration lines for the data on the chart above. Use the celeration finder to find the value of the lines. Check your answers with the key on the following page.

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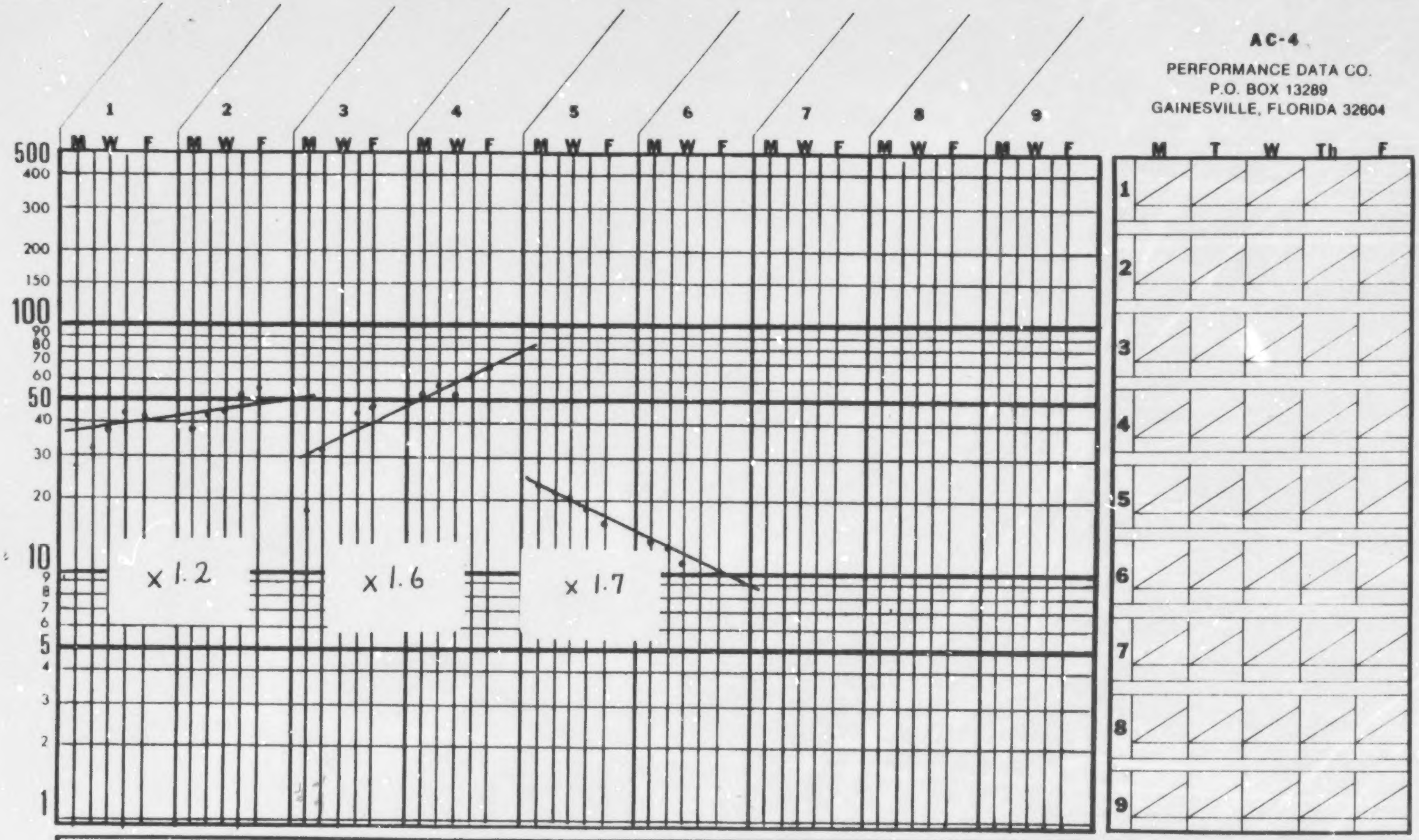

NAME ______________________________ **GRADE** ____________

BEHAVIOR ______________________________ **GOAL** ____________

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STEPS FOR EFFECTIVE DECISION-MAKING*

1. Set individual aims for students
    a. long range aims, i.e., 70-90 correct with 2 errors or less.
    b. weekly aims - set the aim you want student to reach by end of week.
    c. daily aims - set the next day's score slightly higher than previous day's score.

2. Review charted data before making decisions. The following items will be helpful in deciding when you need to make decisions.
    a. aim met for 2 out of 3 days
    b. three days of flat data
    c. less than minimum progress (X1.25)
    d. corrects decreasing

3. Make appropriate interventions.

4. Try, try again.

*Adapted from the Precision Teaching Project Training Manual, Great Falls Public Schools, Great Falls, Montana

Read the following examples and chart the data on page After reviewing the data make appropriate decisions for each student. Check your answers with the key on page 59.

Chris is an eight-year-old third grader. She does daily one minute see/write timings on basic multiplication facts, sums 0-18. Her aim is to reach 70-80 correct digits with two or fewer errors. She can write 130 numbers (0-9) in one minute.

Day	Date	Correct	Incorrect
M	9-14	12	3
T	9-15	14	4
W	9-16	13	3
Th	9-17	12	3
F	9-18	11	4

Jay is a fourth grader. He does daily one-minute timings on see/say vocabulary words. His aim is to reach 70-90 correct words with two or fewer errors.

Day	Date	Correct	Incorrect
M	10-2	50	2
T	10-3	51	2
W	10-4	53	0
Th		Absent	
F	10-6	54	0
M	10-7	54	0
T	10-8	54	0

Betty is a second grader and is on see/write addition facts 0-9. Her goal is 60-80 correct digits in one minute with two or less errors. Math is a difficult subject area for her. She can write 60 numbers (0-9 serial) in one minute.

Day	Date	Correct	Incorrect
M	11-4	30	4
T	11-5	32	3
W	11-6	Absent	
Th	11-7	31	3
F	11-8	30	4

For the following example, chart the data and draw the celeration line. Decide if the student is making minimum progress. Make appropriate decisions for this student:

David is a fourth grader and is on a see/say CVCE sheet. His goal is 70-80 correct words in one minute with two or less errors. He is a very slow reader and has very poor decoding skills. His celeration on the last skill was X1.20.

Day	Date	Correct	Incorrect
M	12-2	28	6
T	12-3	29	5
W	12-4	30	5
Th	12-5	31	4
F	12-6	32	4
M	12-9	34	3
T	12-10	36	2
W	12-11	37	2
F	12-12	39	1

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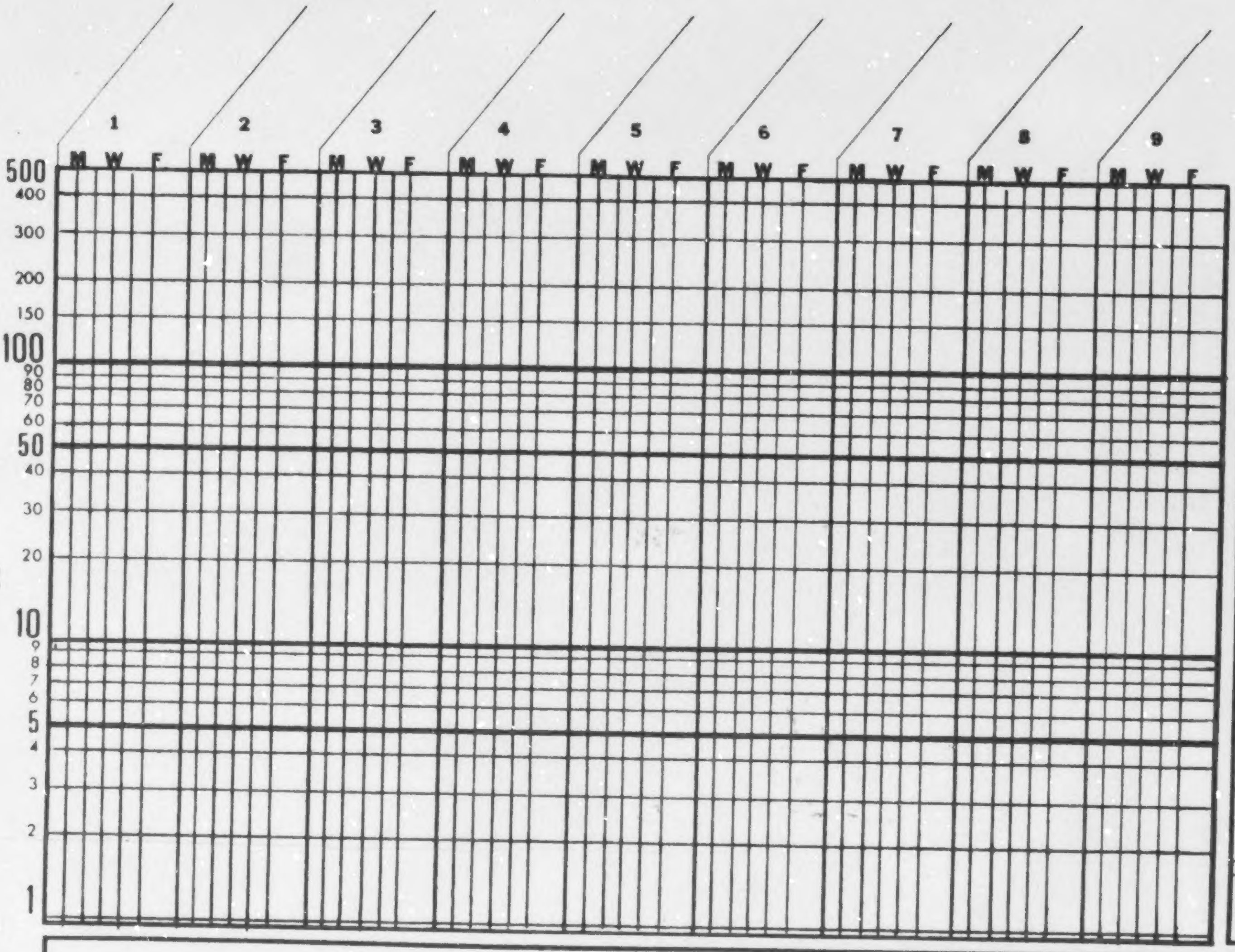

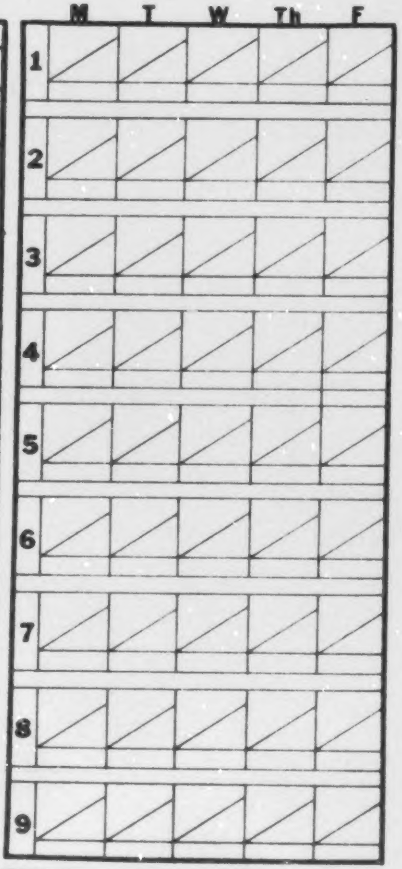
M T W Th F
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9

NAME ______________________ **GRADE** ____________

BEHAVIOR ______________________ **GOAL** ____________

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ANSWER KEYS

Key for page 44.

1. Fluency Building Stage. Is Tool skill (writing numbers) proficient? Extra practice - flash cards, etc. extra reinforcement, step ahead to new skill if all else fails.
2. Acquisition stage - Slice back to easier words.

   More direct instruction with words - language master, tape recorder, etc.
3. Proficient - Met Aim. Can continue to grow for a few days or move on to new skill.

Key for pages 56-57.

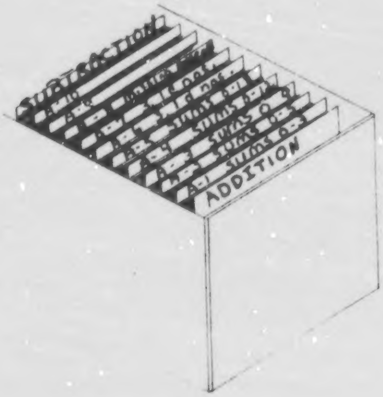
1. Chris is in the Acquisition stage. Tool skills are great. More direct instruction with extra reinforcement may be needed. Provide answers or slice back to 0-9 as a last resort.
2. Fluency Building stage. Points or reinforcement to improve motivation. Extra practice with peer, etc. Set daily or weekly aim. If Jay gets closer but still not to aim then possibly step ahead to next level.
3. Tool skill problem. Daily timings on tool skills until gains are met. Provide fun practices on writing numbers. Positive reinforcement. Continue with 0-9 and set aim within range (40) for Betty. Raise aim as tool skill increases. Set weekly or daily aims.
4. David is making minimum celeration but since he is a fourth grader greater progress should be made. Suggested interventions might include positive reinforcement, extra practice with CVCE words and peer tutors.

CLASSROOM MANAGEMENT

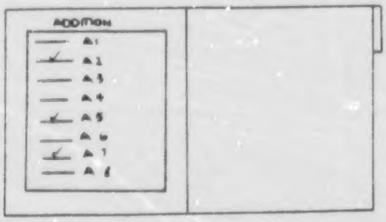
Students need to be involved in managing their own learning. The teacher should encourage students to manage themselves so that no instructional time is wasted. Organize directions well. Students need to know exactly what is expected of them. Some of the following suggestions should be helpful in organizing Precision Teaching in the classroom.

MATERIALS ORGANIZATION

1. A thermal master can be made of the practice sheets that are to be used. Copies can be made and filed. The original practice sheets may be put in acetate covers to protect them for continued use.
2. Use a cardboard box with dividers to organize your practice sheets. Sub-divide the sheets by subjects such as Math: Add/Subtract/Multiply/Divide - Reading: Dolch Words Pre-Primer/Primer/1st Grade/2nd Grade.
3. Color code the materials by writing the number, title and a brief description of the practice sheets with colored marker on folder tab, i.e., (in red) A-1, Sum 0-3.



4 Teach all students to find materials. Give them a sequence of the practice sheets inside the folder and check off with a colored marker the practice sheets they are to use. This can be a guide for them to find the practice sheets in the color coded folders.



5. Designate a place for students' folders. The contents of a student's folder may include: practice sheet, acetate, answer sheet, chart and instructional materials.

6. Acetate sheets, water soluble pens (vis-a-vis) or erasable pencils (grease pencils) save on paper. You will need materials for cleaning the acetates, such as small sponges for use with the water soluble pens and "Handi-Wipes" for the grease pencils.

7. If water soluble pens are used each student can have a baggie with a small sponge inside. Vinegar water helps to sweeten the smell of sponges after continued use.

8. The acetate sheets will need to be cleaned regularly if you use grease pencils. Any spray cleaner such as 409 or fingernail polish remover is helpful in keeping them clean.

TIMINGS

1. If possible set aside the same time period each day for timings. They are effective after breaks or as the first activity of a class period. Timings seem to settle the class down quickly.

2. Establish partners to work with each other on timings. Pair students of equal ability, pair students with compatible personalities or pair younger students with older students.

3. Several devices which can be used to time are:
    a. watch or clock with sweep hand
    b. stop watch
    c. timed tape and tape recorder - tape with one minute intervals of music with signals to start and stop. With a bell as the signal the following format can be set up for the tape.

       "Bell signal to start: 🔔 -Music for one minute-
       🔔 "Bell signal to stop." (15 second interval of silence)
       "Bell signal to start: 🔔 -Music for one minute-
       🔔 "Bell signal to stop." (15 second interval of silence)
       Etc.

       Continue with this same format to make a total of 5-10 minutes of one minute timings. One minute intervals of silence can be taped instead of music.
    d. A "timer person" may be established to start and stop tape or watch the clock or stopwatch.

4. Have a procedure to follow at the timing (practice, do timing, chart). Have the students practice the procedure with you so they understand what to do.

CHECKING

1. For reading, check correct and incorrect words read, for math, check correct and incorrect digits, for spelling, check correct letters in order, incorrect letters and omissions.

2. To accentuate the positive you can have the student circle all of the correct answers rather than marking the errors.

3. All students may keep an answer key in their folders. Students may complete their first practice sheet with the correct answers and that can be used as their answer sheet.
4. After students go on to a new practice sheet their answer keys can be filed for use by other students.
5. Answer keys can be mounted on heavy paper or covered with clear contact paper and filed in the back of the practice sheet folders.
6. Som teachers may prefer to have a separate answer key box with all keys filed by number.
7. As an option for reading timings assign partners. Each student will be a reader and a checker.
8. If student checkers are used, the importance of good checking should be stressed. A good rule of thumb is "the checker is always right."
9. If students are checkers for see-say timings and they are unsure of any words read they can put a "." above the word and ask the teacher about it after the timing.

CHARTING

1. Teach all students to use the chart. Go over the chart each day as drill until they are proficient at charting. See Teaching Students to Chart.
2. Always use pencils on charts.
3. Praise or reward for clear, accurate charts.
4. Always record raw data.
5. Set up a chart checking time daily or weekly, either after the timing or during independent work time.
6. Establish charting monitors.

7. Use colored markers to connect dots and X's. This will enable the student to see vivid learning lines.

DECISION-MAKING

1. Doing timings alone will not improve skills. Timings are only to measure what has been taught. Teaching and practice must be provided.
2. Always include the student in the decision-making process.
3. Ask the student what he/she thinks is the problem.
4. Discuss aims with the student. Set daily or weekly aims to meet individual needs.
5. Errors are "good" learning opportunities, not "bad." Teach students to use them to plan instruction. "I missed all of the X's 4 so I must work on those."
6. Encourage students to skip unknowns during the timings. If they pause over unknowns they will lose their rate in the beginning. Give extra instruction with unknowns and errors.
7. Do not ask a student to practice a skill if he/she is at the attempt level. This student needs more instruction.
8. Teach students basic data decision rules.
    a. Show examples of good learning pictures as on page 40.
    b. Show examples of learning pictures needing help as on page 41.
    c. Emphasize that if corrects are going up and incorrects are going down there is learning.
    d. Stress that if there are three days of flat data a change needs to be made.

e. Students can place a pencil over 9 to 11 days of data. Data should fall under the pencil and indicate the slope of the learning line.

9. Check for performance tensions: fidgety, anxious, squirmy. The following should help a student who is having problems:
   a. Use calm voice.
   b. Remind the student to relax.
   c. Gently reassure the student during the sample.
   d. Have the student practice breathing smoothly if the task is oral.
   e. Have the student practice lifting the pencil if the activity is written.
10. Offer a vacation from the timing for a few days (student may pick the days).
11. High to low variability on the chart often indicates a compliance problem. This may be indicative of emotional or behavioral problems and should be investigated further by the teacher.

MOTIVATION

1. Emphasize to students that there is no competition with each other. Students need to "beat" their own score from the day before.
2. Take the timing before you ask children to do it or take timings with the student.
3. Set up a reinforcement bulletin board where stars are given to students for improvement or reaching their goal.

4. Help students learn how to learn - ask them what you can do to help them learn. Try to have the students discover "how they learn best."

5. To correct possible problems in cheating the following suggestions should be helpful:
   a. Occasionally have student change papers with peers to correct.
   b. Have all students do timing for teacher before a change is made to move on to the next skill.
   c. Don't give the student a reason to cheat. Emphasize that charts are not graded.

GETTING STARTED

Day 1

1. Be sure to have materials well organized before you begin. See Materials Organization page 60.
2. Give the Basic Introduction to Students - see page 68.
3. Explain timing procedures to students - how to do tool skill timing, how to do regular timing - start and stop signals, work from left to right, skip unknowns and mark stop line.
4. Give timings.
5. Explain checking procedures. See pages 18-21. See pages 62-63.
6. Establish procedure for distributing materials. Assign student monitors to pass out folders or have students pick up folders upon entering room.

Day 2

1. Checking: students can now use answer keys for see-write timings to check their own papers. The teacher can monitor the checking.

2. Introduce Lesson 1 on Teaching Students to Chart.

Day 3

1. Review timing and checking procedures.
2. Give timings.
3. Teach Lesson 2 on Teaching Students to Chart.
4. Explain procedure for finding practice sheets in Materials Box.

Day 4

1. Follow timing and checking procedures.
2. Teach Lesson 3 on Teaching Students to Chart.
3. Review procedure for finding practice sheet.

Day 5

1. Follow timing and checking procedures.
2. Review all charting procedures. Have students chart all five of their scores for the week on the AC-4 chart.
3. Have students turn in charts for teacher review. After the teacher reviews the charts, students can be pinpointed that are having difficulty. The teacher or charting monitors can give further assistance to these students.

Day 6

1. Follow timing, checking and charting procedures.
2. Introduce decision-making - see page 64, #8.

Adapted from the Precision Teaching Project Training Manual, Great Falls Public Schools, Great Falls, Montana.

INTRODUCTION TO STUDENTS

To introduce Precision Teaching to students, first discuss the meaning of the word precision. Explain that the root word precise means accurate or doing work the right way. In Precision Teaching, we go beyond just doing work accurately we add the importance of also doing it quickly. Use the example of two students - Bonnie and Clyde. Bonnie completes her math sheet with 100% in 5 minutes, while Clyde also completes his math sheet with 100%, but it takes him 20 minutes. Let the students determine which student is the more proficient learner, in other words which student knows the material the best. Explain further that if a student knows something well, he/she knows it at a good rate. This rationale aids the students in understanding why you are requiring them to do timings. Remind the students that daily practice will help improve their rates. "How do you get better at performing a task?" . . . PRACTICE.

TOOL SKILLS

Before the students do their timing it is best to explain the meaning of tool skills. For example, in math timings, writing digits is an important basic skill if they are to write answers fast. For reading, saying the alphabet or easy words fast is necessary to say higher level words at a faster rate. Give the students practice with their tool skills each day and continue until proficiency is reached. Students will enjoy the tool skill timings and see the practice as a fun game.

GLOSSARY*

Definition of Terms

AIM	An ending goal usually expressed as a specific frequency.
BEST FIT LINE OR LEARNING LINE	A line drawn through a series of data plots on the chart in order to determine the rate of change and direction of behavior.
CELERATION OR LEARNING	A method of measurement used in determining behavior change. It is usually expressed as movements per minute per week. If the behavior is increasing, it is called times (X) celeration. If the behavior is decreasing, it is called divide by (÷) celeration.
FREQUENCY OR RATE	A basic unit of measurement indicating the number of movements divided by a unit of time.
LEARNING OPPORTUNITY	An expression used in place of the term "error." It is indicated on the chart by (X).
LEARNING CHANNELS	The way in which the individual receives the individual, cue or signal; processes it; and responds. For example, with see/write channel, the student sees the cue and writes the answer.

MEDIAN (M)	The middle score of a group of scores when listed in sequential order.
PHASE OR CHANGE LINE	A curricular and/or environmental change indicated by drawing a vertical line one-half day before change.
PINPOINT	A specific behavior chosen to measure, e.g., add facts 0-10; oral reading speed; history facts.
PROBE	A practice skill sheet used specifically for timings to measure skill proficiency.
PRECISION TEACHING	A set of procedures that is based on direct, and daily measurement.
PROFICIENCY	A performance level believed to be necessary in order to assure generalization and maintenance of behavior.
SLICE BACK	A process by which the complexity or amount of curriculum material is made easier for the student to perform.

STANDARD BEHAVIOR CHART	A semi-logarithmic chart that allows us to record human behavior that occurs as infrequently as once per day (.001) to as often as 1,000 per minute. Twenty weeks or one school semester can be recorded on one chart.
TOOL SKILL	Any basic skill which is a prerequisite for the development of another skill.

*Adapted from the Precision Teaching Project Great Falls Public Schools, Great Falls, Montana

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(continued from inside front cover)

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___ Volume III-B: Evaluating the Non-English Speaking Handicapped, 1982.

___ Volume III-C: Mediation and Due Process Procedures, 1982.

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___ Part 1: Training Manual, 1983.
___ Part 2: Math Basic Skills Curriculum, 1983.
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A RESOURCE MANUAL FOR THE DEVELOPMENT AND EVALUATION OF SPECIAL PROGRAMS FOR EXCEPTIONAL STUDENTS

VOLUME V-D:

Techniques of Precision Teaching
Part 2: Math Basic Skills Curriculum

Bureau of Education for Exceptional Students

State of Florida
Department of Education
Tallahassee, Florida
Ralph D. Turlington, Commissioner
Affirmative action/equal opportunity employer

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INTRODUCTION

The following Math basic skills curriculum was developed as a guideline for use in the Specific Learning Disabilities, Educably Mentally Handicapped and Emotionally Handicapped Programs. It is based on selected skills from commonly used materials for math and includes most Florida State Assessment Skills.

For organizational purposes, academic skills within the content areas have been arranged in strands. The Math strands include Numeration, Addition, Subtraction, Multiplication, Division, Decimals, Word Problems, Fractions and Measurement.

The curriculum was written in Precision Teaching terminology in order to help teachers pinpoint specific skill deficits, identify intake-output channels and make each skill measurable.

The skills within each strand are arranged in sequential order with Mastery Skills listed first and component skills indented under each Mastery Skill.

Example: Addition

- See-Write sums, 2D + 1D, 2D + 2D (no reg. & reg.)
  - See-Write sums, 2D + 1D, 2D + 2D (reg.)
  - See-Write sums, 2D + 1D, 2D + 2D (no reg.)

Many of the strands such as Numeration are more complex and are organized with sub-topics. Within these sub-topics skills are organized as listed above.

Example: Numeration - Number Words
See number words - write numerals (0-100)
See number words - write numerals (0-50)
See number words - write numerals (0-20)

The skills underlined at the end of each strand are called Mixed Mastery Skills and are a complitation of all the skills in one strand or several strands. This skill provides a more complete measure of a student's learning through the use of discrimination of mixed skills.

Since it is difficult to rank all skills in a strand, it is not necessary to teach each skill in any sequential order. Teachers are encouraged to utilize those skills which are important to individual student learning.

Specific practice sheets have been designed to measure most skills located in each strand along with the Mixed Mastery practice sheet used to measure competency of that entire strand. The Mixed Mastery sheet can also be used for initial assessment and maintenance skill measurement. Some strands contain too many isolated skills to develop a Mixed Mastery practice sheet. Teachers may want to develop their own practice sheets using a few of the skills in that particular strand.

Many skills in the curriculum have additional practice sheets or "slice backs." These sheets are provided for those students who need smaller steps in the curriculum. For example, if a teacher has pinpointed the skill of 2D + 1D, 2D + 2D (reg.) for a student and there is no progress with that skill there are "sliced sheets" of 2D + 1D (reg) or 2D + 2D (reg.) available for the teacher to utilize. However, it is recommended to guide students through the curriculum in larger steps if possible.

Practice sheets are organized by strands from least to most difficult skills. A listing of all the practice sheets that are available for each strand comes with each set. Each practice sheet is correlated with skill levels and the notations in the upper hand corner include the number of the sheet, a brief description of the skill and an asterisk (*) if it is a Florida State Assessment Skill.

After teachers use the curriculum to pinpoint the skills needed for individual students each listing will be helpful in locating the appropriate practice sheets.

NUMERATION

NUMERALS

Think-Say numerals (0-100)

- Think-Say numerals backwards (50-0)
- Think-Say numerals (0-50)
- Think-Say numerals backwards (20-0)
- Think-Say numerals (0-20)
- Think-Say numerals backwards (10-0)
- Think-Say numerals (0-10)

See-Write numerals (100-10,000) * random

See-Say numerals (100-10,000)* random

- See-Write numerals (0-99)* random
- See-Say numerals (0-99)* random

- See-Write numerals (0-50) random
- See-Say numerals (0-50) random

- See-Write numerals (0-20) random
- See-Say numerals (0-20) random

- See-Write numerals (0-10) random
- See-Say numerals (0-10) random
- See-Trace numerals (0-10) random

See-Write Roman numerals (I-X)

SETS

See sets-Write numerals 0-1000*

    See sets - Write numerals 0-100*

    See sets - Write numerals 0-10

See numerals - Write sets 0-10

CONCEPTS

See-Write numerals or sets (one more, one less)

See-numerals - Write one more or one less

    See sets - Write one more or one less

    See sets - Mark more or less

See-Say +, -, =, >, <.

See-Say =, >, <.

See-Say +, -, =.

See-Write >, <, = (0-100)

See numeral - Mark smaller or larger (0-100)

    See-Write >, <, = (0-50)

    See numeral - Mark smaller or larger (0-50)

    See-Write >, <, = (0-20)

    See numeral - Mark smaller or larger (0-20)*

See-Write >, < ,= (0-10)

See numeral - Mark smaller or larger (0-10)

SEQUENCE

See numeral sequence - Write missing numerals (0-10)

Think-Write numerals (0-100)

Think-Write numerals (0-50)

Think-Write numerals (0-20)

Think-Write numerals (0-10)

See-Mark ordinals 11th - 99th *

See-Mark ordinals 1st to 10th *

Hear-Mark ordinals 1st to 10th

See-Write numerals before and after (0-100)*

See-Say numerals before and after (0-100)

See-Write numerals before and after (0-50)

See-Say numerals before and after (0-50)

See-Write numerals before and after (0-20)

See-Say numerals before and after (0-20)

See-Write numerals before and after (0-10)

See-Say numerals before and after (0-10)

Think-Say count by's (5's, 10's, 2's, 3's, 4's to 100)

See sequence-Write missing numerals (5's, 10's 2's)

See numerals - Write in order (0-1,000)*

NUMBER WORDS

See number words - Write numerals (0-100)

- See number words - Write numerals (0-50)
- See number words - Write numerals (0-20)
- See number words - Write numerals (0-10)*

See numerals-Write number words (0-10)*

PLACE VALUE

See-Say place value of 3 and 4 digit numerals

- See-Say place value of 2 digit numerals

ROUNDING

See-Write numerals to the nearest 100

- See-Write numerals to the nearest 10*

ADDITION

See-Write addition facts (sums 0 - 18) horizontal *

See-Write addition facts (sums 0 - 18) vertical *

- See-Write addition facts (sums 0 - 9) vertical

See-Write sums, three 1D nos. (0-18)*

- See-Write sums, three 1D nos. (0 - 10)

See-Write missing addends (0 - 18)

See-Write sums, 2D + 1D, 2D + 2D (no regrouping & regrouping)

- See-Write sums, 2D + 1D, 2D + 2D (regrouping)
- See-Write sums, 2D + 1D, 2D + 2D (no regrouping)*

See-Write sums, 3D + 1D, 3D + 2D (no regrouping & regrouping)*

- See-Write sums, 3D + 1D, 3D + 2D (regrouping) *
- See-Write sums, 3D + 1D, 3D + 2D (no regrouping) *

See-Write sums, 3D + 3D, 4D + 4D (no regrouping & regrouping)*

- See-Write sums, 3D + 3D, 4D + 4D (regrouping)*
- See-Write sums, 3D + 3D, 4D + 4D (no regrouping)*

See-Write sums, four 3D nos. (no regrouping & regrouping)*

See-Write sums, three 4D nos. (no regrouping & regrouping)*

See-Write sums multi-digit + multi-digit (no regrouping & regrouping)

SUBTRACTION

- See-Write subtraction facts (0 - 18) horizontal *
- See-Write subtraction facts (0 - 18) vertical*
  - See-Write subtraction facts (0 - 9) vertical

- See-Write addition and subtraction facts (0 - 18)

- See-Write differences, 2D - 1D, 2D - 2D (no regrouping & regrouping)
  - See-Write differences, 2D - 1D, 2D - 2D (regrouping)
  - See-Write differences, 2D - 1D, 2D - 2D (no regrouping)*

- See-Write differences, 3D - 1D, 3D - 2D (no regrouping & regrouping)
  - See-Write differences, 3D - 1D, 3D - 2D (regrouping)
  - See-Write differences, 3D - 1D, 3D - 2D (no regrouping)

- See-Write differences, 3D - 3D, 4D - 4D (no regrouping & regrouping)
  - See-Write differences, 3D - 3D, 4D - 4D (regrouping)*
  - See-Write differences, 3D - 3D, 4D - 4D (no regrouping)*

- See-Write differences, 5D - 5D (regrouping)*

- See-Write differences, multi-digit - multi-digit (no regrouping & regrouping)
- See-Write sums and differences, multi-digit numbers (no regrouping and regrouping)

MULTIPLICATION

See-Write multiplication facts (0-81) horizontal*

See-Write multiplication facts (0-81) vertical*

- See-Write multiplication facts (0-45) vertical

See-Write addition, subtraction & multiplication facts

See-Write products, 2D x 1D, 2D x 2D (no regrouping & regrouping)

- See-Write products, 2D x 1D, 2D x 2D (regrouping)
- See-Write products, 2D x 1D, 2D x 2D (no regrouping)

See-Write products, 3D x 1D, 3D x 2D (no regrouping & regrouping)*

- See-Write products, 3D x 1D, 3D x 2D (regrouping)*
- See-Write products, 3D x 1D, 3D x 2D (no regrouping)*

See-Write products, 3D x 3D, 4D x 4D (regrouping)

See-Write products, multi-digit x multi-digit (no regrouping & regrouping)

See-Write sums, differences & products, multi-digit numbers (no regrouping & regrouping)

DIVISION

See-Write division facts (0-81)

- See-Write division facts (0-45)*

See-Write addition, subtraction, multiplication & division facts

See-Write quotients, multi-digit ÷ 1D (remainder & no remainder)

- See-Write quotients, 3D & 5D ÷ 1D (remainder & no remainder)*
- See-Write quotients, 2D ÷ 1D (remainder)

See-Write quotients, multi-digit ÷ 2D (remainder & no remainder)

- See-Write quotients, 3D & 4D ÷ 2D (remainder & no remainder)
- See-Write quotients, 2D ÷ 2D (remainder)

See-Write quotients, multi-digit ÷ multiples of 10*

See-Write quotients, multi-digit ÷ multi-digit (remainder & no remainder)

See-Write sums, differences, products & quotients, multi-digit numbers (no regrouping & regrouping)

DECIMALS

See-Say decimals, 10th, 100th, 1,000th*

See-Mark larger or smaller of two decimals

See-Write decimal place value to 10th, 100th, 1,000th place

See-Write decimal from number word

See fraction-Write equivalent decimal*

See-Mark decimal point for sums, differences, products & quotients, multi-digit decimals

- See-Mark decimal point for quotients, 1D, 2D & 3D decimals
- See-Mark decimal point for products, 1D, 2D & 3D decimals
- See-Write differences for 1D, 2D & 3D decimals
- See-Write sums for 1D, 2D & 3D decimals

WORD PROBLEMS

See key words-Write symbols (+ - x ÷)

- See key words-Write symbols (x ÷)
- See key words-Write symbols (+ -)

See-Write equations for simple word problems (+, -, x, ÷)

- See-Write equations for word simple problems (x, ÷)
- See-Write equations for simple word problems (+, -)

See-Write equations for word problems, 2 & 3 digit (+, -, x, ÷)

- See-Write equations for word problems, 2 & 3 digit (x ÷)
- See-Write equations for word problems, 2 & 3 digit (+, -)

FRACTIONS

- See picture-Write fractions (1/2, 1/3, 1/4)*
- See picture-Write fractions (1/2, 1/4, 1/5, 1/8, 1/10)
- See fraction-Mark equivalent objects (1/2, 1/3, 1/4)*
- See picture-Mark equivalent fractions (1/2, 1/4, 1/3)
- See picture-Mark equivalent fractions (1/2, 1/4, 1/5, 1/8, 1/10)*
- See-Write mixed number to improper fraction
- See-Write improper fraction to mixed number
- See-Write fraction to lowest terms
- See-Write equivalent fractions

ADDITION

- See-Write sums, fractions with mixed numbers (renaming & no renaming)
  - See-Write sums, fractions with mixed numbers (renaming)
  - See-Write sums, fractions with mixed numbers (no renaming)
  - See-Write sums, fractions with unlike denominators
  - See-Write sums, fractions with like denominators*

SUBTRACTION

- See-Write differences, fractions with mixed numbers (renaming & no renaming)
  - See-Write differences, fractions with mixed numbers (renaming)
  - See-Write differences, fractions with mixed numbers (no renaming)
  - See-Write differences, fractions with unlike denominators
  - See-Write differences, fractions with like denominators*
- See-Write sums & differences, fractions with mixed number, (renaming & no renaming)

MULTIPLICATION

See-Write products, proper fraction x mixed numbers

- See-Write products, proper fractions x whole numbers
- See-Write products, proper fractions x proper fractions

DIVISION

See-Write quotients, proper fractions ÷ mixed numbers

- See-Write quotients, proper fractions ÷ whole numbers
- See-Write quotients, proper fractions ÷ proper fractions

See-Write products and quotients, fractions with mixed numbers (renaming & no renaming)

MEASUREMENT

Vocabulary

See-Say measurement words

See-Say measurement abbreviations

TIME

See-Write time shown on clock to minute*

- See-Write time shown on clock to 5 minutes
- See-Write time shown on clock to quarter hour
- See-Write time shown on clock to hour-half hour*

See-Write equivalent values for hours and minutes

CALENDAR FACTS

See-Write days of the week and months of the year in order.

- Think-Say months of the year
- Think-Say days of the week

See-Write month, day, year using a calendar*

See-Write equivalent values for week, month, year.

MONEY

See-Say name of coins: penny, nickel, dime, quarter, half-dollar & dollar

See-Say value of coins: penny, nickel, dime, quarter, half-dollar & dollar

See-Write value of coins: penny, nickel, dime, quarter, half-dollar & dollar

See-Write value of a collection of coins to 5 dollars*

  See-Write value of a collection of coins to 1 dollar

  See-Write value of a collection of coins to 25 cents

See-Write sums and differences, $ (no regrouping & regrouping)

See-Write change from $1.00

STANDARD MEASUREMENT

See-Write equivalent values for linear measurement

See-Write equivalent values for liquid measurement

METRICS

See-Say metric words

See metric words-Say metric unit (length, mass, volume)

See metric word-Write metric symbol

See metric prefix-Write metric value

See metric value-Write metric prefix

NUMERATION

N-1	Counting Direction Sheet
N-2	Trace Numerals 0-10 Random
N-3	Say Numerals 0-10 Random
N-4	Write Numerals 0-10 Random
N-5	Say Numerals 0-20 Random
N-6	Write Numerals 0-20 Random
N-7	Say Numerals 0-50 Random
N-8	Write Numerals 0-50 Random
N-9	Say Numerals 0-99 Random*
N-10	Write Numerals 0-99 Random*
N-11	Say Numerals 100-10,000*
N-12	Write Numerals 100-10,000*
N-13	Roman Numerals (I-X)
N-14	Sets - Write Numerals 0-10
N-15	Sets - Write Numerals 0-100*
N-16	Sets - Write Numerals 0-1000*
N-17	Numerals - Write Sets 0-10
N-18	Sets - More or Less
N-19	Sets - Write One More
N-20	Sets - Write One Less
N-21	Numerals - One More or One Less
N-22	Numerals or Sets - One More or One Less
N-23	Say +, -, =
N-24	Say =, >, <

N-25	Say +, -, =, >,<
N-26	Numerals - Smaller or Larger (0-10)
N-27	Numerals - >,< = (0-10)
N-28	Numerals - Smaller or Larger (0-20)*
N-29	Numerals - >,< = (0-20)
N-30	Numerals - Smaller or Larger (0-50)
N-31	Numerals - >,< = (0-50)
N-32	Numerals - Smaller or Larger (0-100)
N-33	Numerals - >,< = (0-100)
N-34	Numeral Sequence (0-10)
N-35	Writing Numerals Direction Sheet
N-35a	Trace Numeral Sequence (0-9)
N-36	Hear-Mark Ordinals (1st-10th)*
N-37	See-Mark Ordinals (1st-10th)*
N-38	See-Mark Ordinals (11th-99th)*
N-39	Numerals - Before & After (0-10)
N-39a	Numerals - Before (0-10)
N-39b	Numerals - After (0-10)
N-40	Before & After (0-20)
N-40a	Numerals - Before (0-20)
N-40b	Numerals - After (0-20)
N-41	Numerals - Before & After (0-50)
N-41a	Numerals - Before (0-50)
N-41b	Numerals - After (0-50)

N-42	Numerals - Before & After (0-100)*
N-42a	Numerals - Before (0-100)*
N-42b	Numerals - After (0-100)*
N-43	Count By's Direction Sheet
N-44	Numeral Sequence by 5's
N-45	Numeral Sequence by 10's
N-46	Numeral Sequence by 2's
N-47	Write Numerals in Order (0-1000)*
N-48	Number Words - Write Numerals (0-10)*
N-49	Number Words - Write Numerals (0-20)
N-50	Number Words - Write Numerals (0-50)
N-51	Number Words - Write Numerals (0-100)
N-52	Numerals - Write Number Words (0-10)*
N-53	Place Value - 2 digit nos.
N-54	Place Value - 3 & 4 digit nos.
N-55	Rounding - Nearest 10*
N-56	Rounding - Nearest 100

think-say

N-1

(Numerals 0-100, 0-50
0-20, 0-10)

DIRECTIONS:

The student counts orally forward (0, 1, 2, 3, 4, 5...) or backward (10, 9, 8, 7, 6...) repeatedly for one minute. One correct count is given for each numeral the student says in correct sequence. Two digit numerals, such as twenty-one, are counted as one correct answer. Any omissions are counted as errors.

Example: Numerals - backwards 10-0. If the student's oral response in one minute is 10, 9, 8, 6, 5, 4, 3, 2, 1, 0. 10, 9, 6, 5, 4, 3, 2, 1, 0. 9, 8, 7. The count would be 22 correct and 4 incorrect.

see-trace

Tracing Nos.
(0-10)
Random

1 2 3 4 5 6 7 8 9 10 2 1 13

8 7 5 1 3 9 5 4 9 10 5 25

2 4 3 6 8 10 5 3 8 9 1 7 38

3 5 4 6 5 2 3 5 4 10 1 9 51

4 3 6 8 10 9 3 7 6 2 4 1 64

3 2 5 4 3 5 6 7 2 10 1 5 77

1 7 6 8 2 10 1 5 4 9 3 7 90

N-3

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see-say

Numerals (0-10)

7	9	2	0	6	4	1	5	3	8	6	7	10	*13*
2	1	10	5	4	8	7	0	3	9	6	2	1	*26*
7	1	9	2	6	8	0	10	5	4	7	1	5	*39*
0	10	5	4	7	1	5	0	8	3	10	2	6	*52*
4	0	9	3	8	5	7	1	2	4	6	5	2	*65*
4	1	0	7	9	3	8	6	5	10	4	1	6	*78*
10	3	8	2	5	4	2	5	7	0	6	1	9	*91*
3	10	1	4	2	0	6	7	3	5	9	8	10	*104*

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see-write

N-4
Numerals (0-10)

7	9	2	0	6	4	1	5	3	8	6	7	10	2	1	10	16
5	4	8	7	0	3	9	6	2	1	7	1	9	2	6	8	32
0	10	5	4	7	1	5	0	8	3	10	2	6	4	0	9	48
3	8	5	7	1	2	4	6	5	2	4	1	0	7	9	3	64
8	6	5	10	4	1	6	10	3	8	2	5	4	2	5	7	80
0	6	1	9	3	10	1	4	2	0	6	7	3	5	9	8	96
10	3	4	3	6	7	5	2	1	8	5	7	10	0	4	6	112
8	6	7	2	4	0	10	5	9	3	1	9	7	2	8	2	128

OCPS

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see-say

Numerals (0-20)

5	17	2	20	15	3	10	7	19	1	4	18	11	13
16	8	14	6	13	9	12	1	20	4	17	3	19	26
5	16	10	2	11	7	8	15	7	14	4	2	2	39
18	13	20	5	3	17	1	6	19	9	10	12	16	52
3	20	11	2	4	13	15	1	18	5	6	17	19	65
14	9	8	7	12	20	1	19	13	2	18	16	3	78
17	15	4	11	5	10	6	4	12	19	2	17	20	91
7	13	1	18	14	17	15	9	3	8	11	19	17	104

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see-write

N-6
Numerals (0-20)

5	17	2	20	15	3	10	7	19	1	4	18	11	16	8	14	16
6	13	9	12	1	20	4	17	3	19	5	16	10	2	11	7	32
8	15	7	14	4	2	18	13	20	5	3	17	1	6	19	9	48
10	12	16	3	20	11	2	4	13	15	1	18	5	6	17	19	64
14	9	8	7	12	20	1	19	13	2	18	16	3	17	15	4	80
11	5	10	6	4	12	19	2	16	20	7	13	1	18	14	17	96
15	9	3	8	11	19	17	10	17	4	12	5	18	6	16	1	112
20	14	13	17	2	5	18	12	6	17	4	19	3	7	15	11	128

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N-7

see-say

Numerals (0-50)

5	17	10	24	6	36	21	47	9	29	38	42	4	13
2	11	31	43	9	34	23	1	14	28	3	46	16	26
0	20	18	4	22	40	39	5	41	13	2	37	48	39
3	25	12	19	48	17	6	15	39	4	50	26	43	52
1	24	6	15	31	44	9	27	0	14	34	18	49	65
7	20	5	30	14	3	49	36	8	37	41	4	25	78
5	42	9	26	3	38	8	19	32	4	45	23	50	91
1	17	0	24	46	15	3	40	34	21	7	47	13	104

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N-8

Numerals (0-50)

see-write

5	17	10	24	6	36	21	47	9	29	38	42	4	30	7	45	16
2	11	31	43	9	34	23	1	14	28	3	46	16	22	8	32	32
0	20	18	4	22	40	39	5	41	13	2	37	48	8	33	44	48
3	25	12	19	48	17	6	15	39	4	50	26	43	35	10	21	64
1	24	6	15	31	44	9	27	0	14	34	18	49	8	42	50	80
7	20	5	30	14	3	49	36	8	37	41	4	25	11	22	47	96
5	42	9	26	3	38	8	19	32	4	45	23	50	33	44	12	112
1	17	0	24	46	15	3	40	34	21	7	47	13	31	2	29	128

N-9

OCPS

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see-say

(Numerals (0-99)

43	70	47	9	85	59	23	19	68	53	12	65	79	13
83	7	95	25	76	14	35	90	77	1	48	94	58	26
46	66	62	88	4	69	8	27	93	49	45	97	38	39
0	26	60	3	22	72	72	54	10	86	17	36	51	52
84	44	87	24	32	71	64	16	61	99	82	30	73	65
6	92	33	21	82	52	5	67	78	2	86	74	13	78
40	95	67	13	32	52	81	63	42	73	98	23	15	91
41	56	94	24	65	46	50	27	57	33	48	89	39	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-10
Numerals (0-99)

43	70	47	9	85	59	23	19	68	53	12	65	79	83	7	95	16
25	76	14	35	90	77	1	48	94	58	46	66	62	88	4	69	32
8	27	93	49	45	97	38	0	26	60	3	22	72	54	10	86	48
17	36	51	84	44	87	24	32	71	64	16	61	99	82	30	73	64
6	92	33	21	82	52	5	67	78	2	86	74	13	40	95	67	80
13	32	52	81	63	42	73	98	23	15	41	56	94	24	65	46	96
50	27	57	33	48	89	39	64	55	76	11	83	96	7	29	91	112
31	51	64	18	3	41	75	56	20	34	14	61	43	80	98	28	128

N-11

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Numerals (100-10,000)

828	1000	422	9683	763	8841	574	3852	256	10,000	10
494	1739	267	8241	225	7952	431	796	4963	1111	20
288	7452	997	6963	5877	339	3496	654	9999	413	30
985	1428	839	5876	6314	696	752	2913	179	3958	40
6363	585	5874	379	841	6785	9274	398	538	974	50
4172	142	3696	642	2849	193	761	7354	3142	413	60
389	4367	431	9785	822	7696	376	4785	255	2517	70
1424	214	1339	552	963	4270	551	5745	762	4162	80
3472	193	952	8386	328	9762	628	6852	795	1628	90
9998	213	8486	530	1388	615	2242	421	7841	652	100

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-12
Numerals (100-10,000)

828	1000	422	9683	763	8841	574	3852	256	10,000	10
494	1739	267	8241	225	7952	431	796	4963	1111	20
288	7452	997	6963	5877	339	3496	654	9999	413	30
985	1428	839	5876	6314	696	752	2913	179	3958	40
6363	585	5874	379	841	6785	9274	398	538	974	50
4172	142	3696	642	2849	193	761	7354	3142	413	60
389	4367	431	9785	822	7696	376	4785	255	2517	70
1424	214	1339	552	963	4270	551	5745	762	4162	80
3472	193	952	8386	328	9762	628	6852	795	1628	90
9998	213	8486	530	1388	615	2242	421	7841	652	100

N-13

OCPS ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Roman Numerals (1-X)

1	6	3	9	5	8	4	10	16
8	1	7	3	9	10	2	4	34
3	7	10	6	4	2	5	9	50
6	5	4	8	2	7	9	1	67
7	2	10	5	6	1	3	4	82
10	4	9	2	1	4	6	8	98
2	8	5	3	6	9	7	1	116
4	3	5	7	6	2	10	8	134

143

144

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-14
Sets-Numerals (0-10)

Write the number for each set

●●●●● ●●●●● ______	●● ● ______	●●●● ●●●● ______	●● ______	●●●● ●●● ______	●●● ●● ______	● ______	●●●● ●●●● ______	●●● ●● ______	●●● ______	11
●●● ● ______	●●● ●●● ______	● ______	●●●●● ●●●● ______	●● ●● ______	●●●● ●●● ______	______	●●● ●●● ______	●●●● ●●●● ______	● ______	21
●● ● ______	●●●●● ●●●●● ______	● ● ______	●●●● ●●● ______	●●●●● ______	●●●● ●● ______	●●●● ______	●● ● ______	●●●● ______	●●● ●●● ______	32
●● ______	●●● ●●● ______	______	●●● ______	●●●● ●●●● ______	● ● ______	●●●●● ●●●●● ______	●● ●● ______	●●●●● ______	●●●●● ● ______	43
●●● ● ______	●●●●● ●● ______	●● ● ______	●●●●● ●●●● ______	●● ______	● ______	●●● ______	●●●● ● ______	●●●●● ●●● ______	●●● ● ______	53
●●●●● ● ______	●●●●● ●●● ______	●●● ●● ______	●● ●● ______	●●●● ●● ______	●●●● ______	●●●●● ●●●●● ______	● ● ______	●●● ●● ______	●●●● ●●● ______	64
●● ● ______	●●● ●●● ______	● ______	●●●● ●●● ______	●● ______	●●● ●● ______	●●●●● ● ______	______	●●●●● ●●●● ______	●●● ______	74

N-15

● 10

■ 1

see-write

Sets - Numerals (0-100)*

Write the number for each set

● ■■■■ ■■■■	●●● ■■■■	●● ■■■■ ■■■	●●●	●●● ■■■■	10
●●● ■■	●●●● ●●● ■■	● ■■■ ■■■	● ■■	●●● ●●● ■■■■■	20
●● ■■■	●●● ■■■ ■■■	●●● ●●● ■■■■ ■■■	●●●● ■■■ ■■■	■■■■ ■■■■	29
●●●● ■	● ■■■■	●●● ■	●●●● ●●● ■■■■ ■■■■	● ■■■■ ■■■■■	39
● ■	●	■■■■ ■■■	●●●●● ■■■■ ■■■■	● ■■■■ ■■■	48
●●●● ●●●● ■■■■	●●●● ■■■	●●●●●	●●●●●● ■■■■■■	●● ■■■■■	58
●●●●● ■■■ ■■■	●●●●● ●●●● ■■	●●●● ●●●● ■	●●●●● ●●●● ■■■■	■■■ ■■■	67

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

● 100
■ 10
□ 1

see-write

N-16

Sets - Numerals (0-1000)

Write the number for each set

●●● ■■■	●●●● ■■■■■■ □□□□	●● ■■■■■■ □□□□□	■ □□□	●● □□□ □□□	14
●● ■■■■ □□□	■■■■ ■■■■ □□□	●●●●● ●●●●●	● ■■ □□□□□□□	□□□□ □□	27
●●●● ●●●● ■	●●●●● ■■ □□□□□□□	■■■ □□□□□□□□	●●●●●● ■■■	●●● ●●● ■■■■■ ■■■	38
■■■■■■ □□□□	●●●●● ●●●● ■■■ □□□	●●●● ■■ □□□□□□□	●●●● ●●● ■ □□□	■■■■■■ □	49
● ■ □□□□□	□□□□□ □□□□	■■■■ □□□□	■■ □□□□□	● ■	60
●●●● ■■■■■ □□	●●● ■ □□□□□□	■ □□□□□□	●●●●● ●●●● ■ □□□□□	●●● ●● ■■ □□	74
■■■■ □□□□□□	●●●● □□□□	●●●●● ■■■■	■■■■■ ■■■■ □□□□ □□□□	●●●	87

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-17

see-write

Numerals - Sets (0-10)

Write the dots for each number

3	8	2	7	5	10	4	6	1	9	11
4	7	3	10	2	7	5	6	2	6	22
5	8	1	10	4	7	3	9	2	7	33
4	10	2	8	1	3	9	5	7	6	43
3	6	1	4	7	10	5	8	9	2	53
7	2	4	3	10	8	6	5	1	9	63
10	8	3	5	1	9	2	4	6	7	73

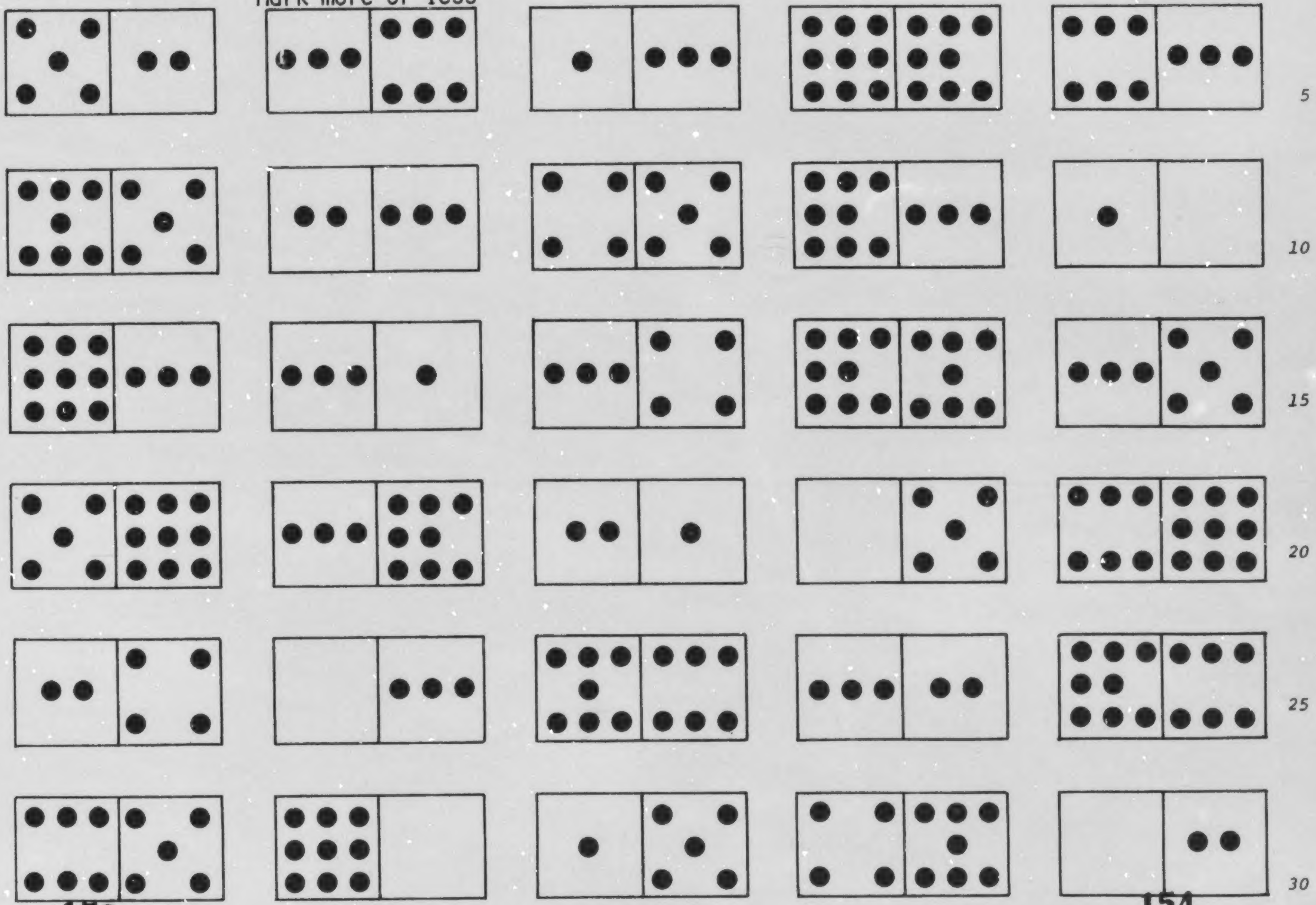
ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

N-18

Sets (more or less)

Mark more or less



OC
PS

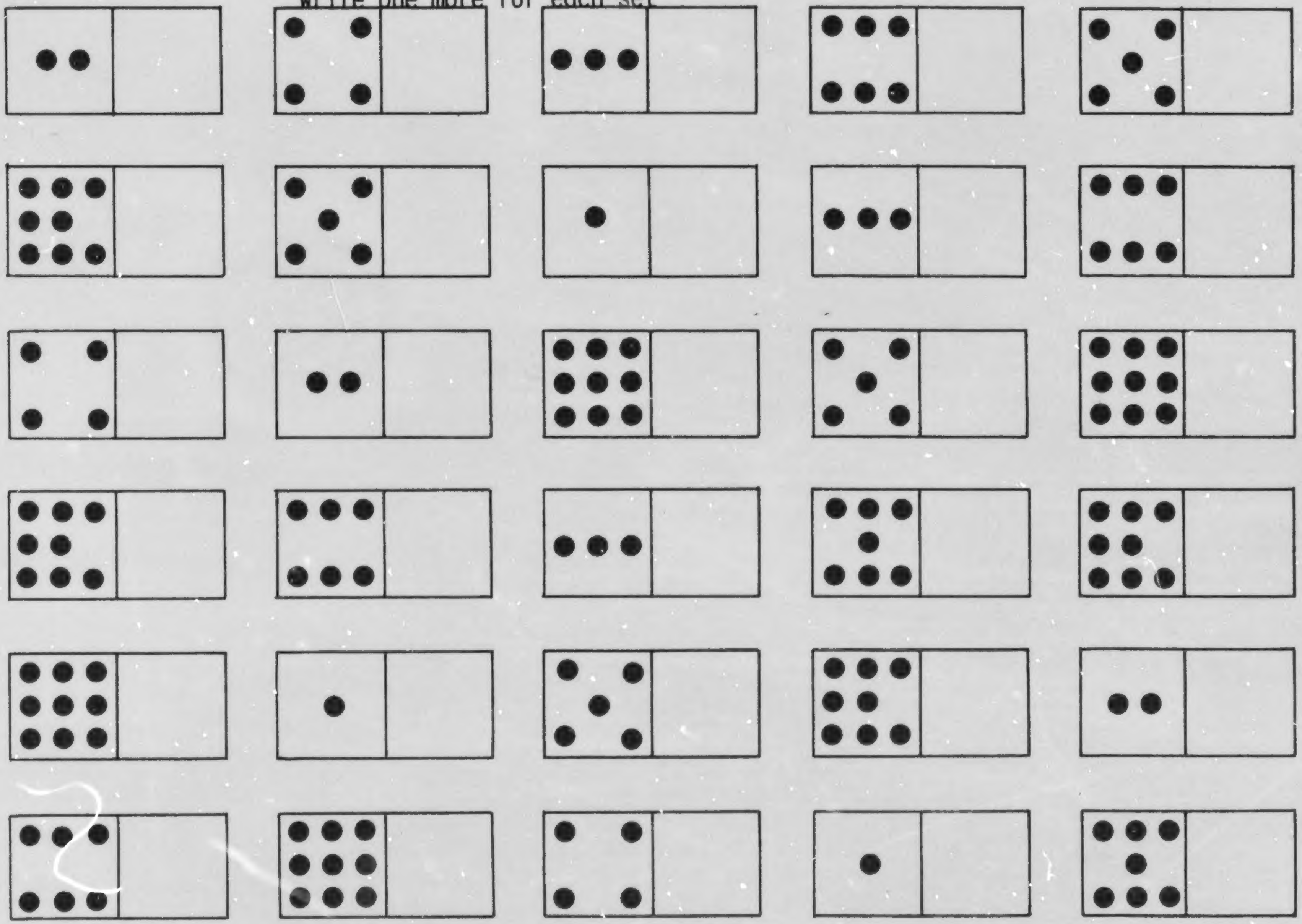
ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-19

see-write

Sets (1 more)

Write one more for each set



25

53

86

123

153

185

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-20

see-write

Sets (1 less)

Write one less for each set

●●		● ● ● ●		●●●		●●● ●●●		●●● ●● ●●●		18
●●● ● ●●●		● ● ● ● ●		● ● ●●● ● ●		●●● ●●● ●●●		●●		43
●●●		●●● ●● ●●●		●●● ●●●		●●		● ● ● ●		61
● ● ● ● ●		●●		●●● ● ●●●		●●● ●●● ●●●		●●●		82
● ● ● ●		●●● ●●● ●●●		●●		● ● ● ●		●●● ●●● ●●●		105
● ● ● ● ●		●●●		●●● ●● ●●●		●●● ●●●		●●● ● ●●●		129

N-21

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Numerals (1 more or 1 less)

Write 1 more					Write 1 less					
3	8	2	7	5	10	4	6	1	9	10
4	7	6	10	1	9	5	3	2	8	21
2	9	5	8	3	7	1	4	10	6	32
4	6	3	7	10	2	5	9	1	8	43
1	8	9	2	5	3	10	6	4	7	54
2	9	3	10	6	4	1	7	5	8	65
5	1	7	3	9	2	6	8	4	10	76
4	10	2	8	6	5	3	9	7	1	86
1	4	6	7	5	2	9	10	8	3	97
3	2	8	10	9	1	6	5	7	4	108

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-22

see-write

Numerals or Sets (1 more or 1 less)

Write 1 more

●●●●● | 2 | 4 | 3

●● | ●●●●●● | 7

1 | 5 | ●●●●●●● | 0

● | ●●●● | 6

●●●●●●●● | 8 | 5 | 2

●●● | ●●●●●●●●● | 9

Write 1 less

7 | ●●●● | 10 | 5 18

3 | ●●●●●●●●● | ●●●●●● 47

8 | 2 | ☐ | ●●●●●●●● 70

4 | ●● | 6 | 9 84

●●●●●●● | 8 | ●●● 110

5 | ●●●●●●●● | ●●●●● 141

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

N-23

+, -, =

+	-	=	-	+	=	+	+	=	=	10
-	-	+	=	-	=	+	-	+	+	20
=	+	-	+	=	+	-	=	-	-	30
+	=	-	-	+	-	=	+	=	+	40
-	+	=	=	-	+	=	+	-	=	50
=	-	+	+	-	+	=	+	-	=	60
+	-	+	=	-	+	=	-	+	=	70
-	+	-	=	+	-	=	+	=	-	80
=	=	+	-	+	=	=	-	=	=	90
+	-	=	-	+	-	=	+	-	=	100

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

N-24
=, >, <

=	>	<	=	>	<	=	=	<	>	10
<	>	=	>	<	=	>	<	=	=	20
>	<	=	<	=	>	=	>	<	>	30
<	>	=	=	<	=	>	=	>	<	40
>	<	=	>	<	>	<	=	<	<	50
=	>	<	<	>	=	=	>	>	<	60
>	<	=	=	<	>	>	<	>	<	70
<	>	=	>	<	<	>	=	<	=	80
=	<	>	<	>	=	<	>	>	=	90
=	>	<	>	<	>	=	<	=	>	100

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

N-25
+, -, =, >, <

-	+	>	<	=	<	+	-	>	=	10
=	>	<	-	+	>	-	<	=	+	20
>	<	-	+	=	-	>	+	<	-	30
=	-	+	>	<	<	=	+	>	-	40
<	>	+	=	-	+	-	=	<	>	50
=	+	-	+	>	<	>	=	-	<	60
-	=	<	>	+	=	-	>	<	+	70
+	-	=	<	>	>	<	+	-	+	80
<	>	=	+	-	+	=	+	>	<	90
-	=	>	+	>	<	-	=	+	-	100

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

N-26
Smaller or Larger (0-10)

3, 10	9, 2	7, 1	4, 8	6, 5	2, 9	10, 7	4, 3	8
7, 9	2, 1	3, 10	8, 6	4, 5	7, 1	9, 10	2, 3	16
5, 4	3, 9	2, 10	6, 4	3, 4	8, 1	10, 2	9, 7	24
7, 10	9, 3	2, 8	5, 1	9, 10	1, 5	2, 3	7, 8	32
9, 1	7, 3	4, 8	5, 2	3, 5	2, 8	9, 4	7, 6	40
5, 8	1, 6	10, 3	6, 2	4, 1	3, 7	9, 5	1, 9	48
6, 7	8, 3	2, 4	5, 9	1, 10	7, 6	7, 9	10, 3	56
2, 7	10. 8	3, 5	6, 9	2, 6	3, 7	3, 1	5, 2	64
1, 8	4, 1	5, 4	8, 6	3, 6	4, 6	6, 10	1, 10	72
2, 3	9, 4	8, 3	4, 8	6, 4	7, 2	3, 2	2, 8	80

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-27

see-write

$>, <, =$ (0-10)

7 2	8 4	6 10	5 5	4 6	8 6	6 5	7 7	8
7 1	10 1	4 6	1 1	3 6	5 4	1 8	9 2	16
0 0	3 6	9 7	2 3	4 3	9 9	3 10	7 1	24
2 4	6 5	2 9	10 7	2 2	0 9	2 1	6 8	32
4 5	1 7	4 4	1 8	7 4	10 2	6 6	3 4	40
3 3	10 2	7 10	9 3	2 8	5 1	9 10	8 5	48
2 3	9 1	7 3	4 8	5 2	5 3	4 4	1 2	56
6 1	8 8	3 10	4 9	6 2	4 1	4 10	0 1	64
5 8	9 4	6 4	10 10	2 6	5 5	8 10	9 5	72
9 2	2 2	4 2	7 10	3 4	4 1	3 5	8 4	80

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-28

see-mark

Smaller or Larger (0-20)*

6, 16	19, 5	12, 1	10, 11	18, 8	4, 3	17, 15	9, 7	8
14, 2	15, 17	9, 11	7, 13	16, 3	4, 5	12, 18	14, 6	16
2, 19	8, 10	11, 1	12, 6	2, 9	15, 10	4, 8	19, 18	24
3, 16	5, 17	7, 10	17, 9	1, 5	4, 14	3, 6	16, 8	32
18, 15	19, 12	11, 2	9, 7	2, 12	6, 19	18, 15	17, 1	40
11, 3	8, 5	10, 4	16, 14	6, 9	19, 7	7, 12	15, 14	48
3, 2	16, 4	18, 11	5, 10	8, 1	14, 8	4, 3	11, 13	56
6, 17	10, 5	2, 7	18, 16	12, 19	9, 15	12, 6	19, 10	64
1, 18	14, 11	4, 5	7, 17	3, 15	16, 2	9, 8	1, 8	72
5, 19	6, 15	2, 10	12, 11	7, 4	3, 14	17, 9	16, 18	80

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-29
>, <, = (0-20)

2	5	17	18	1	3	4	14	7	8	9	2	16	16	10	17	8
6	5	19	10	12	18	11	19	15	6	16	14	4	1	9	9	16
12	7	3	8	6	3	18	15	14	12	11	11	15	4	5	5	24
7	6	8	7	17	18	10	10	19	9	1	19	2	11	3	4	32
5	12	13	14	6	17	8	16	12	1	10	8	19	2	2	15	40
11	3	7	7	18	12	4	19	16	9	15	14	14	10	9	17	48
17	5	4	15	1	1	8	6	5	8	13	18	11	4	17	2	56
12	3	19	16	18	6	6	14	15	1	7	16	16	4	14	10	64
9	9	10	5	17	2	19	15	12	17	10	12	18	8	6	18	72
8	3	4	7	16	19	1	11	3	4	14	17	5	7	11	16	80

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

N-30
Smaller or Larger (0-50)

0, 50	45, 7	37, 27	19, 33	35, 6	23, 24	5, 4	21, 22	8
16, 15	7, 18	36, 47	40, 26	12, 11	29, 41	46, 13	25, 30	16
1, 3	44, 2	43, 50	3, 2	34, 10	25, 24	10, 19	20, 47	24
41, 43	2, 38	27, 25	14, 11	27, 19	34, 36	0, 1	15, 16	32
40, 26	17, 18	36, 47	29, 41	10, 32	9, 4	13, 42	14, 39	40
8, 46	45, 7	0, 50	13, 12	19, 33	16, 12	28, 30	3, 9	48
37, 27	14, 26	42, 38	7, 18	31, 33	39, 2	50, 0	47, 2	56
35, 4	21, 36	9, 8	49, 48	40, 36	44, 50	41, 39	17, 23	64
32, 11	27, 24	2, 38	3, 5	43, 8	15, 21	8, 9	3, 19	72
29, 30	5, 16	3, 20	18, 24	44, 13	39, 14	19, 10	12, 37	80

N-31

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

>, <, = (0-50)

22 5	30 40	18 8	40 19	10 10	31 33	17 18	19 10	8
27 17	11 19	19 26	16 9	6 18	5 5	18 15	12 12	16
2 37	50 7	10 17	16 16	1 3	15 6	16 12	6 5	24
4 14	0 50	33 33	18 8	14 10	15 15	19 27	9 9	32
7 8	9 2	17 20	42 42	16 14	11 40	8 8	36 47	40
20 20	27 18	13 18	48 32	21 21	32 38	28 30	47 2	48
34 10	15 19	46 34	11 11	25 16	44 21	5 22	10 18	56
5 7	3 3	40 8	3 35	24 31	14 13	12 21	22 19	64
43 22	20 9	25 25	42 18	13 17	23 32	3 30	0 0	72
2 0	12 7	50 4	4 4	16 49	19 19	48 50	46 21	80

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-32

see-mark

Smaller or Larger (0-100)

35, 6	21, 22	9, 8	67, 72	36, 47	76, 67	23, 24	1, 3	8
44, 2	92, 84	0, 50	14, 11	19, 33	16, 15	12, 11	28, 30	16
5, 8	83, 57	43, 50	63, 26	55, 15	34, 10	82, 28	25, 24	24
16, 61	58, 56	37, 27	24, 36	62, 59	27, 29	5, 4	25, 26	32
13, 10	76, 85	62, 78	40, 26	32, 96	12, 9	29, 41	64, 48	40
91, 92	46, 82	74, 47	15, 12	27, 19	34, 36	0, 1	48, 84	48
54, 45	19, 91	22, 90	38, 49	98, 97	78, 87	6, 2	98, 89	56
68, 52	84, 96	88, 78	3, 2	37, 73	31, 33	98, 100	57, 55	64
49, 50	42, 41	79, 80	65, 96	7, 9	18, 24	72, 50	87, 19	72
99, 28	100, 99	8, 9	69, 68	55, 68	70, 66	90, 96	1, 3	80

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-33

see-write

>, <, = (0-100)

87 19	43 50	26 26	90 96	70 66	55 68	69 68	42 42	8
19 10	89 89	87 19	30 30	18 24	9 9	65 96	79 80	16
88 78	30 20	57 55	98 100	37 37	37 73	3 2	56 56	24
28 29	65 96	98 89	5 4	78 87	98 97	78 78	22 90	32
20 10	17 18	48 84	95 95	34 36	27 19	14 11	74 47	40
28 30	82 80	62 48	29 41	12 11	32 96	59 59	62 78	48
49 48	22 22	30 41	54 56	23 24	62 59	19 33	73 73	56
60 79	20 47	25 24	82 28	34 10	55 15	62 26	43 50	64
10 19	3 2	28 30	12 11	16 15	19 33	14 11	92 92	72
42 38	94 95	1 3	28 24	31 31	36 47	67 72	9 8	80

N-34

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Numeral Sequence (0-10)

0	1		3	4		6	7		9	10		1	2		5
4		6	7		9		0	1		3		5	6		11
8			0		2		4		6		8		10		19
1		3		5		7			10		1			4	27
5		7		9					3		5				37
9			1					6		8	9		0	1	45
2		4	5		7				0			3			54
6			9				2					7			65
10				3	4	5				9					75
		5				9			1				5		86

N-35

think-write

Numerals (0-10, 0-50, 0-100)

The student writes numbers in correct sequence. One correct count is given for each numeral written in correct order. Two digit numbers, such as 21, are counted as two correct answers. Any omissions are counted as errors.

Example - Numerals 0-50. If the student's written response in one minute is 0, 1, 2, 3, 4, 5, 9, 10, 11, 12, 14, 15, 16, 20, 21, 22..... The count would be 16 correct and 7 incorrect.

N-35a

(Numerals 0-9)

see-trace

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark
hear-mark

N-36 & N-37
Ordinals (1st-10th)*

TENTH	0 0 0 0 0 0 0 0 0 0	SEVENTH	0 0 0 0 0 0 0 0 0 0	FIFTH	0 0 0 0 0 0 0 0 0 0	3
FIRST	0 0 0 0 0 0 0 0 0 0	SECOND	0 0 0 0 0 0 0 0 0 0	NINTH	0 0 0 0 0 0 0 0 0 0	6
SIXTH	0 0 0 0 0 0 0 0 0 0	THIRD	0 0 0 0 0 0 0 0 0 0	FOURTH	0 0 0 0 0 0 0 0 0 0	9
FIRST	0 0 0 0 0 0 0 0 0 0	FIRST	0 0 0 0 0 0 0 0 0 0	EIGHTH	0 0 0 0 0 0 0 0 0 0	12
THIRD	0 0 0 0 0 0 0 0 0 0	FOURTH	0 0 0 0 0 0 0 0 0 0	FIFTH	0 0 0 0 0 0 0 0 0 0	15
SECOND	0 0 0 0 0 0 0 0 0 0	FIFTH	0 0 0 0 0 0 0 0 0 0	NINTH	0 0 0 0 0 0 0 0 0 0	18
EIGHTH	0 0 0 0 0 0 0 0 0 0	SEVENTH	0 0 0 0 0 0 0 0 0 0	FIRST	0 0 0 0 0 0 0 0 0 0	21
SECOND	0 0 0 0 0 0 0 0 0 0	TENTH	0 0 0 0 0 0 0 0 0 0	SIXTH	0 0 0 0 0 0 0 0 0 0	24
FIRST	0 0 0 0 0 0 0 0 0 0	FOURTH	0 0 0 0 0 0 0 0 0 0	THIRD	0 0 0 0 0 0 0 0 0 0	27
FIFTH	0 0 0 0 0 0 0 0 0 0	SECOND	0 0 0 0 0 0 0 0 0 0	SIXTH	0 0 0 0 0 0 0 0 0 0	30
SEVENTH	0 0 0 0 0 0 0 0 0 0	SIXTH	0 0 0 0 0 0 0 0 0 0	EIGHTH	0 0 0 0 0 0 0 0 0 0	33
SECOND	0 0 0 0 0 0 0 0 0 0	TENTH	0 0 0 0 0 0 0 0 0 0	NINTH	0 0 0 0 0 0 0 0 0 0	36
FOURTH	0 0 0 0 0 0 0 0 0 0	FIFTH	0 0 0 0 0 0 0 0 0 0	THIRD	0 0 0 0 0 0 0 0 0 0	39
NINTH	0 0 0 0 0 0 0 0 0 0	FOURTH	0 0 0 0 0 0 0 0 0 0	FIRST	0 0 0 0 0 0 0 0 0 0	42
TENTH	0 0 0 0 0 0 0 0 0 0	EIGHTH	0 0 0 0 0 0 0 0 0 0	SIXTH	0 0 0 0 0 0 0 0 0 0	45
SECOND	0 0 0 0 0 0 0 0 0 0	FIFTH	0 0 0 0 0 0 0 0 0 0	THIRD	0 0 0 0 0 0 0 0 0 0	48
SEVENTH	0 0 0 0 0 0 0 0 0 0	SECOND	0 0 0 0 0 0 0 0 0 0	FIRST	0 0 0 0 0 0 0 0 0 0	51
THIRD	0 0 0 0 0 0 0 0 0 0	SIXTH	0 0 0 0 0 0 0 0 0 0	SEVENTH	0 0 0 0 0 0 0 0 0 0	54
TENTH	0 0 0 0 0 0 0 0 0 0	EIGHTH	0 0 0 0 0 0 0 0 0 0	FOURTH	0 0 0 0 0 0 0 0 0 0	57
SECOND	0 0 0 0 0 0 0 0 0 0	NINTH	0 0 0 0 0 0 0 0 0 0	FIFTH	0 0 0 0 0 0 0 0 0 0	60

N-38

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

Ordinals (11th-99th)*

TWELFTH	11th	0 0 0 0 0	SIXTY-SECOND	61st	0 0 0 0 0	TWENTY-THIRD	21st	0 0 0 0 0	3
THIRTY-FOURTH	31st	0 0 0 0 0	ELEVENTH	10th	0 0 0 0 0	SEVENTY-SEVENTH	75th	0 0 0 0 0	6
FIFTEENTH	11th	0 0 0 0 0	EIGHTY-FOURTH	81st	0 0 0 0 0	THIRTY-THIRD	31st	0 0 0 0 0	9
FORTY-SIXTH	42nd	0 0 0 0 0	NINETY-FIFTH	91st	0 0 0 0 0	EIGHTY-SIXTH	82nd	0 0 0 0 0	12
TWENTY-FIRST	20th	0 0 0 0 0	FOURTIETH	36th	0 0 0 0 0	FORTY-SEVENTH	45th	0 0 0 0 0	15
FIFTY-SEVENTH	56th	0 0 0 0 0	FOURTEENTH	11th	0 0 0 0 0	SEVENTY-THIRD	71st	0 0 0 0 0	18
NINETEENTH	16th	0 0 0 0 0	SEVENTIETH	66th	0 0 0 0 0	TWENTY-EIGHTH	26th	0 0 0 0 0	21
NINETY-FIRST	90th	0 0 0 0 0	SIXTEENTH	15th	0 0 0 0 0	THIRTIETH	26th	0 0 0 0 0	24
THIRTEENTH	11th	0 0 0 0 0	EIGHTY-SECOND	80th	0 0 0 0 0	NINETY-NINTH	96th	0 0 0 0 0	27
SEVENTY-EIGHT	66th	0 0 0 0 0	SEVENTEENTH	15th	0 0 0 0 0	SIXTY-FIFTH	61st	0 0 0 0 0	30
EIGHTEENTH	16th	0 0 0 0 0	FIFTY-FIRST	50th	0 0 0 0 0	TWENTY-FOURTH	21st	0 0 0 0 0	33
NINETIETH	86th	0 0 0 0 0	SEVENTY-FOURTH	71st	0 0 0 0 0	THIRTY-NINTH	36th	0 0 0 0 0	36
FIFTY-THIRD	51st	0 0 0 0 0	FORTY-EIGHTH	46th	0 0 0 0 0	SEVENTY-FOURTH	71st	0 0 0 0 0	39
FIFTEENTH	11th	0 0 0 0 0	TWENTY-SIXTH	25th	0 0 0 0 0	NINETY-FIFTH	91st	0 0 0 0 0	42
SIXTY-SEVENTH	71st	0 0 0 0 0	THIRTY-SECOND	31st	0 0 0 0 0	ELEVENTH	10th	0 0 0 0 0	45
EIGHTY-EIGHTH	86th	0 0 0 0 0	TWENTY-THIRD	21st	0 0 0 0 0	SEVENTY-NINTH	76th	0 0 0 0 0	48
FORTY-SIXTH	45th	0 0 0 0 0	FIFTY-SEVENTH	56th	0 0 0 0 0	TWELFTH	11th	0 0 0 0 0	51
NINETY-THIRD	91st	0 0 0 0 0	THIRTY-EIGHTH	36th	0 0 0 0 0	SIXTY-FOURTH	61st	0 0 0 0 0	54
FIFTEENTH	11th	0 0 0 0 0	SEVENTIETH	76th	0 0 0 0 0	THIRTY-FIRST	30th	0 0 0 0 0	57
EIGHTY-SEVENTH	86th	0 0 0 0 0	NINETY-FOURTH	91st	0 0 0 0 0	SIXTY-THIRD	61st	0 0 0 0 0	60

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-39

Before, After (0-10)

___ 10	___ 5	4 ___	2 ___	___ 7	1 ___	___ 8	3 ___	8
6 ___	9 ___	___ 3	5 ___	8 ___	___ 2	___ 1	0 ___	16
___ 3	8 ___	___ 1	7 ___	___ 2	___ 4	5 ___	___ 10	24
0 ___	2 ___	___ 6	1 ___	___ 8	___ 5	___ 9	3 ___	32
___ 7	___ 3	4 ___	___ 1	9 ___	6 ___	8 ___	___ 10	40
2 ___	___ 5	___ 8	7 ___	1 ___	___ 6	3 ___	___ 4	48
___ 9	1 ___	___ 10	5 ___	4 ___	___ 2	___ 3	___ 7	56
6 ___	___ 8	___ 5	7 ___	9 ___	___ 4	3 ___	___ 2	64
___ 1	10 ___	4 ___	___ 9	2 ___	___ 6	8 ___	___ 3	72
5 ___	___ 7	9 ___	___ 2	1 ___	___ 4	___ 3	6 ___	80

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-39a

see-write

Before (0-10)

___ 8	___ 2	___ 4	___ 7	___ 9	___ 3	___ 5	___ 10	8
___ 1	___ 6	___ 10	___ 4	___ 8	___ 5	___ 2	___ 7	16
___ 3	___ 9	___ 5	___ 2	___ 4	___ 7	___ 6	___ 1	24
___ 10	___ 8	___ 9	___ 1	___ 6	___ 3	___ 4	___ 2	32
___ 5	___ 7	___ 10	___ 3	___ 9	___ 4	___ 2	___ 8	40
___ 6	___ 1	___ 7	___ 2	___ 5	___ 8	___ 4	___ 10	48
___ 9	___ 3	___ 1	___ 6	___ 4	___ 7	___ 5	___ 2	56
___ 8	___ 10	___ 2	___ 4	___ 3	___ 6	___ 1	___ 9	64
___ 7	___ 5	___ 10	___ 8	___ 4	___ 2	___ 6	___ 1	72
___ 3	___ 2	___ 9	___ 10	___ 5	___ 7	___ 4	___ 8	80

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-39b

After (0-10)

10 ___	5 ___	3 ___	9 ___	7 ___	4 ___	2 ___	8 ___	8
6 ___	1 ___	7 ___	2 ___	5 ___	8 ___	4 ___	0 ___	16
9 ___	3 ___	1 ___	6 ___	7 ___	4 ___	2 ___	5 ___	24
8 ___	0 ___	2 ___	4 ___	3 ___	6 ___	1 ___	9 ___	32
7 ___	5 ___	8 ___	2 ___	4 ___	9 ___	3 ___	0 ___	40
1 ___	6 ___	0 ___	4 ___	8 ___	5 ___	2 ___	7 ___	48
3 ___	9 ___	2 ___	5 ___	7 ___	4 ___	6 ___	1 ___	56
0 ___	8 ___	9 ___	1 ___	6 ___	3 ___	4 ___	2 ___	64
5 ___	7 ___	1 ___	6 ___	2 ___	4 ___	8 ___	0 ___	72
2 ___	3 ___	8 ___	4 ___	7 ___	5 ___	0 ___	9 ___	80

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-40

see-write

Before, After (0-20)

___ 20	___ 5	2 ___	13 ___	12 ___	0 ___	5 ___	___ 15	8
19 ___	___ 3	___ 6	___ 11	5 ___	9 ___	4 ___	1 ___	16
___ 18	7 ___	8 ___	___ 10	14 ___	___ 16	20 ___	___ 17	24
15 ___	___ 5	0 ___	___ 12	___ 13	___ 2	5 ___	20 ___	32
___ 1	___ 4	___ 9	___ 5	11 ___	6 ___	3 ___	___ 19	40
17 ___	20 ___	16 ___	___ 14	10 ___	___ 8	___ 7	18 ___	48
12 ___	___ 15	___ 20	5 ___	13 ___	___ 12	2 ___	0 ___	56
9 ___	19 ___	___ 6	___ 4	5 ___	___ 11	1 ___	___ 3	64
___ 10	___ 17	7 ___	20 ___	14 ___	8 ___	___ 16	___ 18	72
___ 19	___ 1	6 ___	3 ___	___ 15	13 ___	9 ___	___ 7	80

N-40a

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Before (0-20)

___ 4	___ 12	___ 18	___ 11	___ 5	___ 3	___ 19	___ 10	8
___ 17	___ 2	___ 14	___ 1	___ 7	___ 16	___ 8	___ 15	16
___ 6	___ 9	___ 13	___ 20	___ 10	___ 15	___ 19	___ 8	24
___ 3	___ 16	___ 5	___ 7	___ 11	___ 1	___ 18	___ 14	32
___ 12	___ 2	___ 4	___ 17	___ 9	___ 20	___ 6	___ 13	40
___ 11	___ 10	___ 18	___ 4	___ 19	___ 7	___ 12	___ 3	48
___ 1	___ 15	___ 17	___ 7	___ 2	___ 8	___ 14	___ 16	56
___ 20	___ 8	___ 6	___ 10	___ 13	___ 9	___ 15	___ 19	64
___ 2	___ 7	___ 8	___ 17	___ 1	___ 16	___ 20	___ 10	72
___ 15	___ 9	___ 12	___ 19	___ 11	___ 6	___ 18	___ 5	80

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-40b
After (0-20)

10 ___	19 ___	3 ___	5 ___	11 ___	18 ___	12 ___	4 ___	8
15 ___	8 ___	16 ___	7 ___	1 ___	14 ___	2 ___	17 ___	16
20 ___	6 ___	13 ___	9 ___	8 ___	19 ___	15 ___	10 ___	24
14 ___	18 ___	1 ___	11 ___	7 ___	5 ___	16 ___	3 ___	32
13 ___	6 ___	20 ___	9 ___	17 ___	4 ___	2 ___	12 ___	40
3 ___	4 ___	7 ___	19 ___	12 ___	18 ___	10 ___	11 ___	48
16 ___	14 ___	8 ___	2 ___	7 ___	17 ___	15 ___	1 ___	56
19 ___	15 ___	9 ___	13 ___	10 ___	6 ___	8 ___	20 ___	64
10 ___	7 ___	16 ___	1 ___	17 ___	8 ___	20 ___	2 ___	72
5 ___	18 ___	6 ___	11 ___	19 ___	12 ___	9 ___	15 ___	80

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

N-41

see-write

Before, After (0-50)

___ 40	___ 47	38 ___	27 ___	___ 1	19 ___	___ 50	43 ___	8
15 ___	42 ___	___ 5	___ 17	2 ___	8 ___	___ 33	18 ___	16
___ 32	___ 3	10 ___	12 ___	___ 24	13 ___	0 ___	___ 35	24
39 ___	6 ___	___ 26	___ 29	16 ___	37 ___	___ 34	20 ___	32
___ 25	___ 31	4 ___	44 ___	___ 21	48 ___	___ 7	45 ___	40
30 ___	28 ___	___ 46	___ 50	23 ___	32 ___	___ 17	9 ___	48
___ 10	22 ___	14 ___	35 ___	___ 49	20 ___	___ 36	41 ___	56
8 ___	11 ___	___ 43	___ 50	___ 19	1 ___	___ 27	___ 38	64
___ 18	33 ___	8 ___	___ 2	17 ___	5 ___	___ 42	___ 15	72
___ 45	& ___	___ 48	21 ___	___ 44	___ 4	31 ___	25 ___	80

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-41a
Before (0-50)

___ 50	___ 24	___ 40	___ 1	___ 47	___ 19	___ 38	___ 43	8
___ 17	___ 42	___ 8	___ 18	___ 15	___ 33	___ 2	___ 5	16
___ 12	___ 35	___ 3	___ 12	___ 24	___ 32	___ 13	___ 6	24
___ 29	___ 20	___ 16	___ 39	___ 26	___ 37	___ 34	___ 38	32
___ 21	___ 4	___ 45	___ 31	___ 48	___ 7	___ 25	___ 44	40
___ 50	___ 9	___ 30	___ 23	___ 28	___ 17	___ 46	___ 32	48
___ 49	___ 10	___ 41	___ 22	___ 35	___ 20	___ 36	___ 14	56
___ 19	___ 38	___ 8	___ 50	___ 43	___ 1	___ 27	___ 11	64
___ 17	___ 42	___ 18	___ 15	___ 5	___ 33	___ 8	___ 2	72
___ 44	___ 25	___ 7	___ 45	___ 21	___ 4	___ 31	___ 48	80

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-41b
After (0-50)

43 __ 38 __ 19 __ 47 __ 1 __ 40 __ 27 __ 0 __ 8
5 __ 2 __ 33 __ 15 __ 18 __ 8 __ 42 __ 17 __ 16
6 __ 13 __ 32 __ 24 __ 12 __ 3 __ 35 __ 12 __ 24
38 __ 34 __ 37 __ 26 __ 39 __ 16 __ 20 __ 29 __ 32
44 __ 25 __ 7 __ 48 __ 31 __ 45 __ 4 __ 21 __ 40
32 __ 46 __ 17 __ 28 __ 23 __ 30 __ 9 __ 0 __ 48
14 __ 36 __ 20 __ 35 __ 22 __ 41 __ 10 __ 49 __ 56
11 __ 27 __ 1 __ 43 __ 0 __ 8 __ 38 __ 19 __ 64
2 __ 8 __ 33 __ 5 __ 15 __ 18 __ 42 __ 17 __ 72
48 __ 31 __ 4 __ 21 __ 45 __ 7 __ 25 __ 44 __ 80

N-42

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Before & After (0-100)*

___ 54	___ 10	69 ___	57 ___	___ 74	46 ___	65 ___	___ 88	8
66 ___	___ 92	___ 86	___ 73	95 ___	91 ___	___ 62	___ 45	16
___ 53	___ 90	71 ___	1 ___	___ 13	81 ___	97 ___	___ 21	24
80 ___	___ 37	0 ___	58 ___	___ 31	78 ___	93 ___	___ 79	32
49 ___	___ 94	___ 32	___ 72	34 ___	68 ___	___ 74	___ 52	40
___ 12	___ 35	51 ___	27 ___	___ 43	5 ___	41 ___	___ 11	48
98 ___	___ 26	___ 87	___ 50	82 ___	55 ___	19 ___	___ 85	56
___ 33	___ 24	39 ___	9 ___	___ 59	77 ___	8 ___	___ 84	64
52 ___	___ 14	___ 15	___ 47	70 ___	96 ___	___ 4	___ 42	72
___ 18	___ 23	99 ___	6 ___	___ 48	3 ___	36 ___	___ 2	80

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-42a
Before (0-100)*

___ 60 ___ 29 ___ 83 ___ 38 ___ 17 ___ 30 ___ 7 ___ 56 8

___ 2 ___ 36 ___ 48 ___ 6 ___ 99 ___ 23 ___ 16 ___ 3 16

___ 42 ___ 44 ___ 96 ___ 25 ___ 70 ___ 47 ___ 15 ___ 57 24

___ 88 ___ 54 ___ 65 ___ 10 ___ 46 ___ 69 ___ 74 ___ 52 32

___ 45 ___ 66 ___ 92 ___ 62 ___ 91 ___ 86 ___ 95 ___ 73 40

___ 21 ___ 53 ___ 97 ___ 90 ___ 81 ___ 13 ___ 1 ___ 71 48

___ 79 ___ 80 ___ 93 ___ 37 ___ 31 ___ 78 ___ 99 ___ 58 56

___ 52 ___ 49 ___ 75 ___ 100 ___ 94 ___ 34 ___ 68 ___ 32 64

___ 11 ___ 41 ___ 12 ___ 43 ___ 5 ___ 35 ___ 51 ___ 27 72

___ 85 ___ 98 ___ 26 ___ 19 ___ 50 ___ 82 ___ 55 ___ 87 80

N-42b

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

After (0-100)*

2 ___	36 ___	3 ___	48 ___	6 ___	99 ___	23 ___	18 ___	8
42 ___	4 ___	96 ___	70 ___	47 ___	15 ___	52 ___	84 ___	16
8 ___	77 ___	59 ___	9 ___	39 ___	24 ___	33 ___	85 ___	24
19 ___	55 ___	82 ___	50 ___	87 ___	26 ___	98 ___	11 ___	32
41 ___	5 ___	43 ___	27 ___	51 ___	35 ___	12 ___	52 ___	40
75 ___	68 ___	34 ___	72 ___	32 ___	94 ___	49 ___	79 ___	48
93 ___	78 ___	31 ___	58 ___	0 ___	37 ___	80 ___	21 ___	56
97 ___	81 ___	13 ___	1 ___	71 ___	90 ___	53 ___	45 ___	64
62 ___	91 ___	95 ___	73 ___	86 ___	92 ___	66 ___	88 ___	72
65 ___	46 ___	74 ___	57 ___	69 ___	10 ___	54 ___	82 ___	80

N-43

think-say

Count By's (5's, 10's,
2's, 3's, 4's)

DIRECTIONS:

The students count orally by 5's, 10's, 2's, 3's, 4's to 100 repeatedly for one minute. One correct count is given for each numeral the student says in correct sequence. Two digit numbers are counted as one correct answer. Any omissions are counted as errors.

Example: Count by 5's to 100. If the student's oral response in one minute is 5, 10, 15, 25, 30, 35, 45, 55, 60, 65, 80, 85, 90, 95, 100. 5, 10, 15, 20, 40, 45, 50, 55, 60, 65, 70. The count would be 26 correct and 8 incorrect.

N-44

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Count by's (5's to 100)

5	10			25		35	40		50			65			8
80		90			5			20		30		40			17
55			70				90		100				20		27
30							65		75			90			38
	10			25					50		60	65			48
80			95					20				40			59
55		65						95				15			70
	35		45							80				100	81
5			20			35								75	92
80				100										50	104

221

222

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-45
Count by's (10's to 100)

10	20			50	60		80			10			40		8
		80				20			50				90		19
10					60	70			100	10			40		28
60			90			20		40			70			100	37
10			40					90		10		30		50	46
60		80		100				40				80			56
	20		40				80			10				50	66
60			90			20					70			100	76
10				50			80				20			50	86
			90		10					60					98

N-46

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Count by's (2's to 100)

2	4			10	12		16			22			28		8
		36			42			48			54		58		18
62			68			74			80		84		88		27
	94		98			4			10				18		37
22		26				32			38			44			47
50			56		60		64			70				78	56
	82			88		92		96			2			8	65
	12			18			24		28			34			75
40		44			50				58				66		85
70					80					90					97

N-47

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Numeral Sequence (0-1000)*

WRITE NUMBERS IN CORRECT ORDER

770	669	661	___	___	___	896	891	895	___	___	___	18
352	123	406	___	___	___	564	472	303	___	___	___	36
986	994	991	___	___	___	636	782	734	___	___	___	54
922	978	828	___	___	___	555	323	492	___	___	___	72
211	142	179	___	___	___	654	494	411	___	___	___	90
863	872	817	___	___	___	241	193	365	___	___	___	108
946	933	879	___	___	___	345	581	444	___	___	___	126
585	698	358	___	___	___	379	785	541	___	___	___	144
134	111	122	___	___	___	919	906	934	___	___	___	162
333	241	238	___	___	___	431	482	427	___	___	___	180
852	925	901	___	___	___	582	639	592	___	___	___	198
213	182	173	___	___	___	740	738	755	___	___	___	216

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-48

Number Word to Numeral (0-10)*

three	ten	nine	two	seven	one	eight	four	six	zero	11
nine	two	ten	seven	four	three	one	eight	six	five	22
seven	nine	two	one	three	ten	six	eight	four	five	33
one	seven	nine	ten	two	three	five	four	eight	six	44
seven	five	one	eight	three	nine	two	ten	six	zero	55
three	four	eight	one	ten	two	nine	seven	five	six	66
four	six	seven	ten	nine	three	two	eight	five	one	77
nine	ten	five	one	two	three	zero	eight	four	six	88
six	ten	nine	one	seven	three	four	eight	five	two	99
three	five	eight	four	two	one	seven	ten	six	nine	110

N-49

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Number Word to Numeral (0-20)

thirteen	eleven	five	seven	one	three	four	six	fifteen	twenty	14
twelve	seventeen	nine	two	ten	sixteen	eighteen	nineteen	eight	fourteen	30
twenty	zero	one	fourteen	five	nine	ten	three	two	twelve	43
eleven	thirteen	nineteen	four	fifteen	six	seven	eight	seventeen	sixteen	59
eighteen	one	three	eleven	four	nineteen	nine	zero	twenty	thirteen	74
sixteen	two	fourteen	seven	eight	ten	twelve	six	fifteen	seventeen	90
sixteen	eighteen	zero	nineteen	twelve	twenty	fifteen	eight	ten	two	107
eleven	thirteen	eighteen	four	seventeen	three	fourteen	sixteen	nineteen	seven	121
five	nine	one	ten	eighteen	twenty	thirteen	four	zero	six	137
fifteen	seventeen	nineteen	eleven	one	eight	three	nine	twelve	twenty	153

N-50

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Number Word to Numeral (0-50)

thirteen	four	zero	forty-four	twenty-nine	fifty	thirty-seven	twenty-two	14
forty-six	forty-nine	thirty	fifteen	twenty-four	one	ten	nineteen	29
twenty-six	forty-two	twenty-one	eleven	two	twelve	five	seven	42
sixteen	thirty-eight	forty-five	eight	three	six	forty	forty-one	55
thirty-four	twenty-eight	thirty-nine	seventeen	fourteen	thirty-one	twenty-five	eighteen	71
twenty	nine	thirty-five	thirty-six	forty-three	forty-seven	twenty-three	thirty-two	86
twenty-seven	thirty-three	forty-eight	fifty	zero	thirty	fourteen	four	100
forty-three	sixteen	six	one	fifteen	seventeen	forty	forty-nine	114

N-51

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Number Word to Numeral (0-100)

zero	twenty-one	twenty-seven	sixty-six	seventeen	seven	ninety-eight	fourteen	14
one hundred	seventy-one	seventy-five	seventy-two	ninety-seven	twenty-five	fifteen	ninety-nine	31
fifty-one	seventy-six	forty-six	nine	one	fifty-six	eighty-three	eighty	45
ninety	thirty-two	sixteen	ninety-two	twenty-two	fifty-five	thirty-four	sixty-nine	61
forty-eight	ten	eighty-one	sixty-three	ninety-one	eighty-eight	eighty-two	forty-one	76
twelve	eighty-nine	thirteen	fifty	forty-three	sixty-one	fifty-one	fifty-four	92
two	fifty-eight	eighty-six	sixty-eight	ninety-six	sixty	forty-nine	thirty	107
twenty-four	thirty-five	thirty-six	sixty-seven	eighty-four	four	twenty-five	forty-four	122

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-52
Numeral to Num. Word (0-10)*

3	9	2	4	8	5	7	1	6	36
10	8	3	6	9	1	4	5	2	70
7	1	5	10	6	4	8	2	9	104
4	3	10	7	8	2	5	6	1	139
9	5	3	6	2	1	8	10	7	174

N-53

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Place Value-2d

Say the value of each underlined numeral

41	26	64	31	61	85	27	11	16	67	10
48	23	52	58	43	71	90	66	48	87	20
32	15	19	15	82	39	17	64	65	37	30
92	16	84	43	46	12	93	81	57	68	40
99	92	17	18	43	46	12	93	81	18	50
91	68	13	47	71	29	56	28	17	69	60
14	24	30	50	31	82	41	84	55	92	70
27	43	18	65	79	26	31	68	45	17	80
91	33	54	98	47	51	83	92	16	10	90
24	34	81	10	29	75	65	37	70	19	100

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

N-54
Place Value-3 & 4d

Say the value of each underlined numeral

408	976	241	8246	9872	3127	666	208	8
511	7641	8211	9999	1000	400	551	607	16
842	7041	6234	110	213	341	450	7613	24
3768	1001	372	515	621	894	1106	2107	32
2001	1954	1960	8276	7377	1154	9275	2754	40
2123	2425	231	811	472	209	321	436	48
1504	633	501	7041	3129	2346	303	478	56
774	857	2096	7528	6091	8581	864	8343	64
2119	4511	919	686	7047	737	8317	8593	72
630	2041	9008	4304	9612	566	1531	9339	80
999	411	821	322	1435	382	1776	1982	88
851	4311	7779	3264	454	3130	9979	833	96

N-55

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Round Nearest 10*

61	74	43	49	32	35	28	41	16
47	86	92	63	19	66	79	31	32
38	86	46	17	12	29	35	52	48
86	37	91	44	27	85	93	36	64
68	13	18	16	23	37	71	32	80
81	48	78	11	73	58	65	94	96
33	54	19	57	73	51	95	47	112
64	53	12	34	68	88	46	21	128

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

N-56

Round to
Nearest 100

828	585	142	698	358	761	617	431	24
111	817	863	422	597	841	485	852	48
339	817	763	339	376	563	761	639	72
628	852	8241	96	852	774	431	179	96
924	379	541	785	111	654	494	411	120
341	695	780	541	539	427	214	985	144
193	763	365	659	531	919	770	225	168
666	9339	535	933	879	792	345	581	192

ADDITION

A-1	Sums 0-3
A-2	Sums 0-5
A-3	Sums 0-9
A-4	Sums 0-12
A-5	Sums 0-18* Vertical
A-5a	Sums 0-18* Horizontal
A-6	3, 1d nos. 0-10
A-7	3, 1d nos. 0-18*
A-8	Missing Addend 0-9
A-9	Missing Addend 0-18
A-10	2d + 1d, 2d + 2d (no reg.)*
A-10a	2d + 1d (no reg.)
A-10b	2d + 2d (no reg.)*
A-11	2d + 1d, 2d + 2d (w/reg.)
A-11a	2d + 1d (w. reg.)
A-11b	2d + 2d (w/reg.)
A-12	2d + 1d, 2d + 2d (no reg. + reg.)
A-13	3d + 1d, 3d + 2d (no reg.)*
A-13a	3d + 1d (no reg.)*
A-13b	3d + 2d (no reg.)
A-14	3d + 1d, 3d + 2d (w/reg.)*
A-14a	3d + 1d (w/reg.)*
A-14b	3d + 2d (w/reg.)*
A-15	3d +1d, 3d + 2d (no reg. & reg.)*
A-16	3d + 3d, 4d + 4d (no reg.)*

A-17	3d + 3d, 4d + 4d (w/reg.)*
A-17a	3d + 3d (w/reg.)*
A-17b	4d + 4d (w/reg.)
A-18	3d + 3d, 4d + 4d (no reg. & reg.)
A-19	4 - 3d nos. (no reg. & reg.)*
A-20	3 - 4d nos. (w/reg.)*
A-21	Multi-digit (no reg. & reg.)

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-1
(Sums 0-3)

0	0	2	1	1	1	2	0	2	1	0	2	2	0	2	0	1	2	
+2	+1	+0	+0	+2	+1	+1	+3	+1	+1	+1	+1	+0	+2	+1	+1	+1	+1	18
1	1	0	0	0	2	1	1	2	2	1	0	0	0	2	1	0	0	
+0	+3	+2	+1	+1	+1	+2	+1	+0	+1	+0	+2	+2	+3	+1	+1	+3	+1	36
2	1	0	0	0	2	2	1	2	1	2	1	0	0	0	0	0	2	
+0	+0	+3	+2	+1	+0	+1	+2	+1	+1	+0	+1	+3	+2	+1	+2	+3	+1	54
1	0	2	1	1	1	2	0	0	0	1	0	0	0	1	1	2	1	
+1	+1	+0	+2	+0	+1	+1	+2	+3	+1	+1	+1	+3	+2	+1	+2	+1	+0	72
0	0	2	1	1	0	2	1	2	1	1	0	0	1	1	1	2	1	
+2	+1	+0	+1	+0	+3	+1	+1	+1	+1	+0	+3	+1	+0	+1	+2	+0	+0	90

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-2

(Sums 0-5)

0	3	2	2	0	0	3	0	1	3	1	1	1	2	2	4	0	1	
+2	+1	+0	+3	+1	+5	+0	+4	+0	+2	+2	+3	+1	+3	+1	+1	+3	+4	18
2	2	2	2	1	1	0	4	2	0	3	1	2	0	0	3	0	3	
+1	+2	+1	+3	+1	+3	+1	+1	+0	+4	+0	+4	+1	+5	+2	+1	+1	+2	36
1	2	2	3	1	0	1	3	0	4	0	1	0	0	3	2	2	2	
+1	+2	+1	+2	+2	+4	+0	+1	+3	+1	+2	+3	+1	+5	+0	+2	+1	+3	54
1	1	2	0	4	4	2	1	0	3	0	1	0	2	1	2	1	3	
+1	+4	+0	+4	+0	+1	+0	+3	+1	+1	+3	+4	+2	+2	+2	+3	+1	+2	72
0	0	0	2	0	4	0	3	2	1	1	0	0	1	0	3	2	2	
+3	+5	+2	+3	+1	+1	+2	+2	+1	+4	+1	+4	+3	+3	+1	+1	+0	+2	90

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

A-3

see-write

(Sums 0-9)

3	4	6	0	1	2	1	5	4	4	3	9	5	2	1	7	3	3	
+1	+4	+0	+8	+1	+6	+6	+3	+1	+5	+3	+0	+2	+2	+7	+0	+6	+2	18
3	3	0	2	6	4	8	2	8	4	1	5	7	3	6	1	5	1	
+5	+3	+9	+1	+2	+2	+1	+0	+0	+3	+8	+0	+2	+4	+3	+4	+4	+5	36
2	2	1	2	4	4	0	6	8	0	3	2	3	1	9	0	2	2	
+7	+3	+8	+4	+5	+0	+9	+1	+1	+3	+5	+5	+6	+2	+0	+7	+7	+3	54
0	4	4	0	5	5	5	0	2	3	8	0	1	3	6	1	7	1	
+8	+2	+4	+1	+4	+1	+3	+2	+6	+4	+0	+5	+7	+3	+3	+0	+2	+5	72
6	1	5	5	5	3	3	0	3	0	7	2	0	4	0	8	1	0	
+2	+3	+3	+2	+4	+0	+6	+7	+5	+4	+2	+4	+1	+5	+6	+0	+4	+9	90

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-4
(Sums 0-12)

4	6	5	4	6	9	5	5	3	8	3	6	2	7	
+3	+4	+2	+6	+0	+2	+1	+6	+4	+2	+3	+5	+5	+5	21
0	4	3	3	7	5	5	6	3	1	2	5	4	9	
+6	+7	+1	+9	+2	+7	+0	+6	+6	+9	+6	+5	+8	+1	43
1	2	1	3	5	7	6	8	3	8	7	2	6	7	
+8	+8	+5	+8	+3	+4	+3	+2	+5	+4	+1	+9	+2	+3	64
7	5	9	8	1	9	0	4	2	9	4	3	3	8	
+0	+7	+2	+3	+1	+1	+3	+7	+1	+2	+3	+7	+0	+4	86
5	7	1	5	9	9	0	6	1	4	8	6	4	5	
+4	+5	+3	+6	+0	+3	+4	+4	+6	+6	+0	+5	+8	+5	108

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-5
(Sums 0-18)*

5	7	8	8	7	6	2	4	3	3	0	1	0	9	
+1	+4	+5	+6	+7	+9	+8	+6	+7	+9	+6	+2	+2	+9	23
2	7	2	9	5	8	3	9	2	9	0	3	4	0	
+7	+1	+6	+6	+3	+9	+2	+7	+1	+8	+7	+4	+7	+4	42
5	1	4	1	0	9	9	9	3	8	7	1	7	4	
+8	+4	+3	+5	+9	+5	+4	+2	+6	+8	+9	+3	+6	+4	61
9	2	7	6	3	6	6	5	2	1	0	6	6	4	
+3	+5	+3	+7	+5	+1	+6	+9	+9	+7	+8	+5	+4	+8	84
5	7	1	1	8	5	8	5	4	9	3	9	8	2	
+7	+8	+1	+6	+3	+4	+7	+5	+2	+9	+8	+1	+2	+3	105

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

A-5a

see-write

(Sums 0-18)*
horizontal

3+4=____ 7+8=____ 7+4=____ 6+2=____ 8+8=____ 1+9=____ 4+1=____ 8+2=____ 13

8+6=____ 9+0=____ 9+9=____ 3+5=____ 8+1=____ 4+8=____ 5+6=____ 8+5=____ 26

6+7=____ 1+6=____ 5+7=____ 3+8=____ 3+0=____ 6+3=____ 8+9=____ 3+3=____ 38

6+4=____ 9+5=____ 7+2=____ 9+2=____ 3+2=____ 7+3=____ 4+4=____ 4+2=____ 50

5+8=____ 4+7=____ 8+3=____ 9+4=____ 7+7=____ 5+5=____ 5+3=____ 4+5=____ 64

8+8=____ 3+7=____ 6+8=____ 9+3=____ 9+7=____ 4+6=____ 2+8=____ 5+4=____ 79

6+3=____ 6+5=____ 1+3=____ 4+3=____ 8+7=____ 6+6=____ 2+9=____ 8+9=____ 92

9+9=____ 2+2=____ 9+6=____ 8+4=____ 2+5=____ 6+9=____ 7+5=____ 6+1=____ 105

3+6=____ 7+6=____ 1+5=____ 1+2=____ 5+9=____ 4+9=____ 0+6=____ 7+7=____ 117

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-6
(Three ld, 0-10)

4 1 +3	2 3 +1	4 2 +3	3 2 +3	1 2 +0	3 0 +4	2 2 +6	0 8 +1	3 3 +3	4 2 4	12
2 2 +2	1 4 +0	2 5 +3	0 1 +6	4 2 +2	5 0 +3	1 2 +7	4 3 +2	1 5 +1	6 2 1	24
3 1 +4	1 1 +6	3 3 +4	4 2 +2	1 0 +1	4 1 +3	0 6 +2	3 2 +4	1 5 +0	2 2 1	35
0 8 +1	2 3 +3	4 1 +4	1 5 +2	1 0 +3	3 5 +2	4 3 +0	2 4 +3	1 1 +6	5 2 2	46
3 5 +1	1 2 +4	0 5 +3	2 1 +1	1 6 +3	2 3 +3	1 1 +1	2 6 +0	0 5 +0	5 2 3	58

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

(3-1d. 0-18)*

3 6 +9	1 5 +3	4 7 +6	1 2 +3	4 2 +3	3 1 +1	1 6 +5	2 5 +2	9 2 +6	5 2 +3	15
7 2 +4	6 1 +2	5 5 +4	6 5 +2	4 6 +2	8 4 +6	5 4 +8	4 3 +1	6 3 +2	2 4 +2	32
2 1 +4	4 8 +6	3 4 +4	5 1 +1	7 4 +5	3 7 +0	1 2 +1	1 9 +6	5 4 +3	6 3 +5	49
7 5 +6	3 6 +7	7 3 +2	5 2 +1	4 6 +3	3 8 +4	8 2 +8	6 3 +0	7 2 +5	5 0 +1	66
3 5 +2	4 9 +2	3 6 +8	2 3 +2	4 6 +7	5 3 +1	4 1 +1	6 5 +7	5 4 +4	4 5 +2	83

ORANGE COUNTY PUBLIC SCHOOLS
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A-8

(Missing Addend, 0-9)

____ + 8 = 9   0 + ____ = 4   ____ + 5 = 8   1 + ____ = 7   ____ + 0 = 0   5

3 + ____ = 7   ____ + 3 = 3   4 + ____ = 6   ____ + 6 = 8   5 + ____ = 9   10

____ + 0 + 9   2 + ____ = 2   ____ + 0 = 5   0 + ____ = 6   ____ + 3 = 8   15

4 + ____ = 9   ____ + 1 = 3   2 + ____ = 6   ____ + 4 = 5   6 + ____ = 8   20

____ + 5 = 5   3 + ____ = 6   ____ + 6 = 9   4 + ____ = 4   ____ + 1 = 4   25

5 + ____ = 7   ____ + 3 = 5   3 + ____ = 3   ____ + 4 = 8   7 + ____ = 9   30

____ + 1 = 9   5 + ____ = 6   ____ + 3 = 7   0 + ____ = 7   ____ + 1 = 7   35

0 + ____ = 2   ____ + 2 = 3   3 + ____ = 5   ____ + 5 = 7   7 + ____ = 7   40

____ + 8 = 8   9 + ____ = 9   ____ + 3 = 4   1 + ____ = 9   ____ + 0 = 7   45

1 + ____ = 5   ____ + 4 = 7   2 + ____ = 9   ____ + 2 = 6   5 + ____ = 8   50

____ + 6 = 8   3 + ____ = 6   1 + ____ = 7   ____ + 3 = 5   3 + ____ = 6   55

2 + ____ = 9   ____ + 3 = 8   ____ + 4 = 6   5 + ____ = 9   ____ + 3 = 7   60

0 + ____ = 6   4 + ____ = 9   ____ + 6 = 7   2 + ____ = 7   6 + ____ = 9   65

ORANGE COUNTY PUBLIC SCHOOLS
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ORLANDO, FLORIDA

A-9

(Missing Addend, 0-18)

___ + 4 = 10	7 + ___ = 11	___ = 9 = 16	5 + ___ = 14	___ + 9 = 15	5
0 + ___ = 11	___ + 8 = 13	5 + ___ = 12	___ + 9 = 10	6 + ___ = 13	11
___ + 8 = 12	7 + ___ = 13	___ + 9 = 17	3 + ___ = 10	___ + 6 = 10	16
8 + ___ = 14	___ + 3 = 11	9 + ___ = 18	___ + 4 = 12	9 + ___ = 14	21
___ + 7 = 14	9 + ___ = 16	___ + 8 = 10	3 + ___ = 11	___ + 5 = 12	26
4 + ___ = 13	___ + 1 = 10	9 + ___ = 15	___ + 8 = 14	9 + ___ = 17	31
___ + 9 = 12	5 + ___ = 11	___ + 7 = 16	7 + ___ = 14	___ + 7 = 13	36
7 + ___ = 16	___ + 8 = 15	1 + ___ = 10	___ + 6 = 13	6 + ___ = 11	41
___ + 9 = 13	6 + ___ = 15	___ + 9 = 14	3 + ___ = 12	___ + 8 = 17	46
8 + ___ = 15	___ + 4 = 11	4 + ___ = 12	___ + 6 = 12	8 + ___ = 17	51
___ + 6 = 10	9 + ___ = 16	___ + 9 = 15	8 + ___ = 13	___ + 6 = 14	56
8 + ___ = 17	___ + 6 = 13	7 + ___ = 16	___ + 8 = 15	3 + ___ = 11	61
___ + 6 = 12	8 + ___ = 15	___ + 6 = 13	9 + ___ = 12	4 + ___ = 13	66

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-10
(2d+1d, 2d+2d, no reg.)*

43	25	33	14	47	37	58	65	82	35	
+31	+73	+ 5	+62	+ 2	+42	+ 1	+ 2	+16	+44	20
73	58	65	56	28	65	73	81	14	76	
+ 4	+ 1	+ 2	+ 1	+31	+ 2	+ 4	+ 7	+23	+11	40
21	42	98	51	63	22	10	83	38	44	
+35	+26	+ 1	+46	+34	+ 3	+ 6	+16	+21	+ 4	60
36	13	72	29	57	66	82	42	34	19	
+ 2	+ 3	+26	+70	+31	+ 3	+16	+32	+32	+10	80
68	86	31	73	62	42	31	11	52	43	
+ 1	+ 3	+ 3	+ 5	+14	+37	+28	+28	+36	+ 4	100

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-10a
(2d+1d, no reg.)

39	64	80	51	70	62	40	12	22	45	
+ 0	+ 3	+ 1	+ 8	+ 8	+ 7	+ 5	+ 5	+ 4	+ 3	20
16	92	20	72	64	53	30	84	66	42	
+ 1	+ 1	+ 4	+ 2	+ 2	+ 1	+ 6	+ 5	+ 0	+ 3	40
94	80	43	24	18	90	32	73	26	15	
+ 3	+ 3	+ 0	+ 1	+ 1	+ 6	+ 6	+ 5	+ 2	+ 2	60
57	71	61	81	41	55	83	57	30	70	
+ 0	+ 3	+ 1	+ 4	+ 6	+ 1	+ 6	+ 2	+ 9	+ 1	80
23	14	60	35	98	14	61	53	35	86	
+ 2	+ 4	+ 7	+ 4	+ 1	+ 4	+ 7	+ 3	+ 4	+ 3	100

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-10b
(2d+2d, no reg.)*

75	50	22	23	87	20	35	48	35	10	
+12	+15	+76	+72	+12	+12	+44	+31	+22	+29	20
50	26	11	45	23	40	11	62	82	11	
+21	+63	+51	+21	+51	+59	+67	+27	+14	+16	40
30	41	19	20	24	34	23	10	21	23	
+28	+12	+80	+63	+35	+23	+76	+16	+66	+26	60
34	50	33	51	40	35	20	34	13	72	
+44	+22	+62	+16	+18	+53	+63	+14	+25	+15	80
41	32	10	57	29	10	32	60	20	11	
+26	+62	+35	+41	+60	+38	+34	+37	+44	+48	100

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

A-11

see-write

(2d+1d, 2d+2d, w/reg.)

12	47	65	72	48	25	15	78	33	16	
+18	+ 3	+ 5	+ 8	+36	+78	+29	+13	+ 8	+49	21
21	47	77	17	58	65	18	14	26	19	
+ 9	+ 4	+15	+54	+ 1	+ 6	+49	+37	+19	+11	41
16	78	88	17	98	13	15	18	98	17	
+17	+ 4	+ 7	+14	+ 1	+28	+39	+ 3	+ 2	+43	62
19	76	17	46	65	18	37	19	18	23	
+ 5	+ 7	+ 9	+15	+29	+38	+ 6	+ 5	+ 7	+18	82
36	48	53	64	18	15	48	39	42	57	
+15	+14	+ 8	+ 7	+ 9	+17	+14	+19	+39	+16	102

A-11a

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

(2d+1d, w/reg.)

64	15	27	16	49	17	35	29	25	12	
+ 7	+ 8	+ 6	+ 5	+ 8	+ 8	+ 9	+ 1	+ 9	+ 8	20
19	17	25	14	26	13	69	47	38	45	
+ 9	+ 4	+ 8	+ 9	+ 8	+ 8	+ 6	+ 8	+ 7	+ 6	40
85	68	75	55	34	24	79	13	27	49	
+ 7	+ 6	+ 8	+ 5	+ 6	+ 8	+ 2	+ 9	+ 6	+ 6	60
37	19	71	18	85	39	43	28	55	17	
+ 4	+ 8	+ 9	+ 7	+ 5	+ 9	+ 8	+ 8	+ 9	+ 5	80
79	19	38	57	64	56	29	18	72	55	
+ 8	+ 7	+ 9	+ 3	+ 8	+ 4	+ 8	+ 9	+ 8	+ 9	100

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-11b
(2d+2d, w/reg.)

28	59	47	35	69	82	34	25	46	64	
+54	+32	+27	+47	+29	+18	+29	+19	+48	+38	20
76	27	36	23	38	38	83	54	45	78	
+16	+68	+17	+49	+63	+37	+17	+46	+38	+29	46
27	18	57	29	21	29	79	58	77	48	
+39	+87	+23	+71	+49	+26	+17	+18	+25	+52	70
67	38	19	49	18	37	16	65	16	59	
+14	+55	+73	+14	+56	+66	+64	+25	+45	+25	91

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-12
(2d+1d, 2d+2d, no reg. & reg.)

32	43	77	89	41	68	32	66	67	79	
+18	+ 6	+12	+ 9	+29	+11	+ 6	+33	+15	+ 4	20
41	77	82	74	53	81	68	43	99	81	
+48	+47	+ 9	+ 4	+49	+ 6	+26	+38	+ 0	+18	42
68	24	88	72	54	15	47	35	19	74	
+ 1	+15	+ 2	+49	+ 7	+61	+ 7	+ 3	+40	+19	63
24	89	11	19	25	36	74	28	99	76	
+ 5	+15	+ 8	+40	+36	+ 4	+19	+68	+ 4	+ 5	84
76	34	35	32	22	17	34	45	25	27	
+11	+31	+ 8	+ 8	+19	+99	+ 1	+ 2	+32	+99	106

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-13
(3d+1d, 3d+2d, no reg.)*

123 + 5	372 + 16	431 + 57	658 + 1	741 + 1	756 + 3	345 + 14	575 + 4	327 + 22	272 + 6	30
281 + 16	982 + 10	153 + 6	998 + 12	125 + 53	364 + 13	481 + 1	656 + 3	367 + 32	505 + 44	60
526 + 12	411 + 11	361 + 8	400 + 4	320 + 15	222 + 3	589 + 10	812 + 6	122 + 7	721 + 43	90
904 + 5	876 + 16	180 + 1	328 + 11	103 + 1	764 + 24	918 + 21	616 + 3	321 + 46	123 + 6	120
213 + 26	969 + 0	328 + 41	411 + 77	761 + 3	333 + 2	981 + 14	505 + 4	861 + 21	211 + 8	150

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-13a
(3d+1d, no reg.)*

230 + 0	121 + 5	754 + 5	413 + 3	273 + 4	904 + 1	343 + 5	297 + 1	653 + 2	324 + 3	30
530 + 2	427 + 2	311 + 5	715 + 4	352 + 1	355 + 1	232 + 4	613 + 6	422 + 1	152 + 0	60
702 + 3	462 + 7	303 + 6	265 + 3	266 + 2	512 + 7	203 + 0	113 + 5	713 + 6	767 + 1	90
334 + 5	457 + 2	724 + 2	304 + 0	702 + 0	305 + 3	801 + 7	173 + 4	533 + 2	601 + 6	120
353 + 1	548 + 1	513 + 1	401 + 4	240 + 8	360 + 4	632 + 6	805 + 2	161 + 8	106 + 1	150

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-13b
(3d+2d, no reg.)

123 + 45	372 + 16	431 + 47	658 + 21	741 + 51	756 + 23	345 + 14	423 + 16	521 + 62	219 + 30	30
281 + 16	982 + 10	998 + 12	153 + 26	125 + 53	364 + 13	481 + 10	624 + 53	831 + 44	537 + 22	60
526 + 12	411 + 11	721 + 43	400 + 74	320 + 75	222 + 43	589 + 10	804 + 71	612 + 32	126 + 10	90
432 + 23	987 + 11	618 + 11	234 + 32	100 + 69	706 + 14	901 + 32	551 + 26	364 + 33	205 + 91	120
876 + 12	733 + 14	288 + 10	100 + 36	644 + 23	328 + 61	207 + 72	442 + 43	532 + 64	127 + 71	150

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-14

(3d+1d, 3d+2d, w/reg.)*

107 + 97	708 + 54	653 + 9	472 + 18	847 + 53	967 + 4	309 + 85	495 + 7	264 + 36	546 + 7	30
795 + 7	986 + 63	324 + 66	406 + 5	484 + 45	439 + 67	577 + 9	628 + 54	893 + 9	278 + 5	61
985 + 9	751 + 67	187 + 9	452 + 77	963 + 77	295 + 7	537 + 70	347 + 8	504 + 7	646 + 84	92
990 + 15	708 + 93	893 + 9	628 + 88	435 + 76	969 + 63	485 + 9	544 + 57	636 + 6	494 + 7	124
894 + 84	339 + 2	624 + 8	535 + 76	496 + 33	749 + 52	596 + 7	487 + 9	727 + 64	853 + 8	154

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-14a
(3d+1d, w/reg.) *

187 + 4	635 + 5	218 + 2	143 + 8	721 + 9	535 + 6	777 + 7	499 + 5	364 + 7	856 + 9	30
964 + 6	543 + 9	123 + 8	786 + 5	421 + 9	628 + 4	307 + 3	216 + 8	809 + 2	535 + 7	60
884 + 7	936 + 6	215 + 9	116 + 5	323 + 8	296 + 7	132 + 8	423 + 7	757 + 8	616 + 4	90
477 + 7	241 + 9	568 + 6	389 + 9	814 + 9	643 + 8	492 + 9	928 + 5	794 + 6	654 + 8	120
479 + 4	354 + 7	288 + 2	447 + 5	725 + 6	536 + 4	181 + 9	646 + 7	882 + 9	389 + 7	150

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-14b
(3d+2d w/reg.)*

948	465	328	976	382	243	440	591	628	158	
+ 32	+ 63	+ 49	+ 75	+ 81	+ 58	+ 91	+ 38	+ 47	+ 66	31
638	415	277	666	758	860	374	416	297	523	
+ 90	+ 37	+ 58	+ 93	+ 38	+ 64	+ 57	+ 39	+ 12	+ 97	61
943	786	517	394	445	190	567	626	128	271	
+ 99	+ 18	+ 92	+ 95	+ 77	+ 76	+ 23	+ 96	+ 66	+ 53	92
221	404	843	627	948	366	339	552	191	299	
+ 49	+ 19	+ 48	+ 82	+ 62	+ 67	+ 43	+ 49	+ 19	+ 70	123
164	279	569	480	188	319	975	725	898	623	
+ 72	+ 17	+ 56	+ 39	+ 27	+ 68	+ 76	+ 59	+ 61	+ 48	154

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

A-15

see-write

(3d+1d, 3d+2d No reg. & reg.)*

754 + 23	111 + 99	636 + 71	109 + 7	998 + 2	834 + 62	125 + 3	641 + 33	329 + 50	551 + 71	*31*
635 + 5	153 + 26	431 + 57	721 + 79	281 + 16	143 + 8	212 + 92	364 + 3	565 + 22	897 + 31	*61*
721 + 49	842 + 1	535 + 91	481 + 11	982 + 10	377 + 57	123 + 5	627 + 8	272 + 13	366 + 9	*91*
777 + 7	615 + 12	321 + 89	424 + 49	120 + 18	526 + 2	786 + 33	943 + 7	372 + 21	207 + 2	*121*
721 + 3	486 + 12	658 + 94	176 + 23	884 + 16	423 + 3	321 + 86	266 + 3	528 + 2	909 + 9	*151*

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-16
(3d+3d, 4d+4d, no reg.)*

123 +145	372 +116	6589 +1300	4321 +2346	8872 +1116	431 +157	658 +321	2834 +6125	532 +247	31
6180 +1111	741 +151	756 +223	4328 +2311	1003 +6091	7064 +1424	6018 +2321	420 +437	323 +234	63
4213 +1226	6969 +1030	345 +144	281 +516	482 +310	153 +426	4328 +2141	627 +221	5590 +3407	94
1411 +8377	8761 +1123	125 +153	364 +213	7333 +1432	481 +101	526 +212	2736 +2243	464 +115	125
411 +111	2981 +1004	1004 +3692	6442 +3233	721 +143	3280 +4614	400 +174	525 +261	731 +236	156

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

A-17

see-write

(3d+3d, 4d+4d, w/reg.)*

635 +315	2948 +5032	7464 +2163	218 +392	3285 +3409	9765 +1766	535 +191	387 +274	29
3827 +3081	218 +391	2843 +5148	145 +628	4474 +3459	772 +169	777 +107	5793 +3866	57
6355 +3497	4154 +3718	535 +191	864 +167	2774 +8161	943 +164	196 +368	4539 +2547	85
786 +532	6664 +1289	491 +329	7589 +3380	628 +614	8606 +2642	328 +591	482 +873	117
3759 +5589	584 +216	9434 +2391	5864 +4118	736 +271	287 +969	7173 +1898	6246 +2477	148

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-17a

(3d+3d, w/reg.)*

536 +486	343 +167	486 +398	386 +377	429 +291	356 +695	278 +582	23
695 +265	417 +595	337 +497	549 +373	747 +183	298 +328	679 +398	46
298 +245	472 +448	585 +286	627 +184	795 +288	687 +146	276 +474	68
298 +636	179 +785	454 +369	398 +593	548 +394	286 +479	195 +857	91
239 +777	879 +159	489 +594	588 +267	359 +153	263 +777	384 +226	116

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-17b

(4d+4d, w/reg.)

9173 +1898	7946 +2976	8857 +4048	1990 +4976	9865 +1218	9434 +2391	5949 +3419	33
7708 +2754	5392 +1981	8476 +7643	8967 +3554	9875 +6357	2406 +6675	8439 +4567	66
9857 +2909	7518 +6790	6395 +7787	3779 +2008	9008 +1987	9439 +8492	2635 +8876	100
6984 +6354	8596 +9577	6154 +3718	2772 +8161	4404 +3519	6385 +3407	2843 +5248	131
3827 +3681	2843 +5148	1146 +2584	1657 +2543	1685 +1108	1659 +2542	1967 +2058	159

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-18
(3d+3d, 4d+4d, no reg. & reg.)

190 +547	2948 +5032	6589 +1300	7464 +2163	3481 +3809	123 +145	143 +678	25
345 +914	722 +149	4321 +2346	9765 +1703	6852 +2146	535 +191	374 +116	51
4404 +3419	6180 +3618	770 +107	964 +162	6385 +3407	4328 +2311	786 +158	77
943 +164	6154 +3798	756 +223	1003 +6091	345 +114	285 +376	421 +349	101
857 +398	231 +516	668 +674	982 +710	7064 +1424	2772 +8161	4213 +1226	129

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-19
(4-3d nos. no reg. & reg.)*

156	192	420	364	201	169	121	
295	228	306	283	324	209	322	
142	146	142	129	212	139	233	
+168	+122	+120	+154	+241	+109	+201	21
238	121	521	328	356	220	142	
152	222	130	195	292	132	222	
161	120	144	258	152	121	324	
+275	+302	+102	+162	+268	+102	+211	53
262	264	421	564	247	132	101	
425	243	206	223	142	212	220	
366	326	152	334	561	323	212	
+222	+554	+210	+447	+276	+201	+101	78
327	276	121	364	121	237	242	
476	645	323	588	130	255	121	
245	357	120	329	204	864	104	
+123	+245	+202	+144	+102	+378	+200	103

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

A-20
(3-4d nos. w/reg.)*

1659 2358 +1562	2628 1582 +9924	1679 9100 +1367	1865 4738 +3620	1703 8315 +2683	2252 6856 +3160	1000 6791 +2586	34
6962 4648 +2026	5658 2393 +3580	2927 3691 +4000	3865 5738 +2620	9558 3683 +4539	1927 3671 +1006	2865 3739 +4620	68
8251 1256 +2166	5862 6750 +7385	1659 2362 +2426	9581 2616 +1482	1552 6817 +1460	4927 4691 +2000	5927 3691 +5014	101
4560 1346 +1233	3462 9582 +4310	6328 2917 +1212	4787 8293 +7846	5451 5102 +4566	7638 2044 +3481	2163 4395 +3010	135

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

A-21

see-write

(multi-digit, no reg. & reg.

74 +13	38 + 0	233 + 3	123 + 45	456 266 254 +168	58 +62	186 + 5	48 + 8	648 + 25	25
219 + 3	9765 +1703	4321 +2348	746 +221	513 +191	943 +164	51 + 8	121 323 120 +202	35 +47	54
415 + 4	262 425 366 +234	29 + 8	372 +162	756 + 23	8872 +1162	2865 3739 +4620	778 + 8	18 + 9	83
15 + 9	721 + 8	8606 +2642	4787 8293 +7846	47 +58	9173 +1898	219 +382	446 + 25	15 + 4	114
6180 +2719	97 +36	754 +849	880 + 20	35 +22	964 + 6	3865 5738 +2620	7064 + 424	666 + 41	145

SUBTRACTION

S-1	Minuends 0-3
S-2	Minuends 0-5
S-3	Minuends 0-9
S-4	Minuends 0-12
S-5	Minuends 0-18*
S-5a	Minuends 0-18* Horizontal
S-6	Add & Subtract Facts
S-7	2d-1d, 2d-2d,(no reg.)
S-7a	2d-1d (no reg.)*
S-7b	2d-2d (no reg.)*
S-8	2d-1d, 2d-2d, (w/reg.)
S-8a	2d-1d (w/reg.)
S-8b	2d-2d (w/reg.)
S-9	2d-1d, 2d-2d (no reg. & reg.)
S-10	3d-1d, 3d-2d (no reg.)
S-10a	3d-1d (no reg.)
S-10b	3d-2d (no reg.)
S-11	3d- 1d, 3d-2d (reg.)
S-11a	3d-1d (w/reg.)
S-11b	3d-2d (w/reg.)
S-12	3d-1d, 3d-2d (no reg. & reg.)
S-13	3d-3d, 4d-4d (no reg.)*
S-14	3d-3d, 4d-4d (w/reg.)
S-14a	3d-3d (w/reg.)
S-14b	4d-4d (w/one reg.)*

S-14c	4d-4d (w/reg.)
S-15	3d-3d, 4d-4d (no reg. & reg.)
S-16	5d-5d (w/reg.)*
S-17	Multi-digit numbers (no reg. & reg.)
S-18	Add & Subtract, multi-digit nos. (no reg. & reg.)

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-1
(Minuends 0-3)

0	2	1	1	3	3	1	2	2	3	1	3	3	0	1	3	1	2	
-0	-1	-1	-0	-2	-3	-0	-2	-2	-1	-1	-3	-2	-0	-0	-0	-1	-2	18
3	2	2	1	2	3	1	2	1	3	1	1	3	2	1	2	2	3	
-1	-1	-0	-0	-0	-2	-1	-2	-1	-0	-1	-0	-0	-1	-1	-2	-1	-3	36
0	1	3	3	3	3	2	1	2	2	3	1	0	1	3	3	3	3	
-0	-0	-2	-1	-0	-1	-0	-1	-2	-1	-1	-0	-0	-1	-2	-3	-1	-3	54
2	2	3	3	3	1	2	1	1	3	3	1	3	1	2	0	2	2	
-1	-0	-2	-3	-0	-1	-2	-0	-1	-2	-1	-0	-2	-1	-2	-0	-0	-1	72
3	3	2	3	2	2	3	1	1	0	3	3	3	2	1	2	3	3	
-3	-0	-1	-1	-1	-2	-2	-0	-1	-0	-1	-3	-1	-1	-0	-2	-2	-0	90

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-2
(Minuends 0-5)

4	2	5	4	1	5	5	2	4	3	5	5	4	1	5	5	1	4	
-1	-2	-2	-3	-0	-1	-2	-1	-2	-1	-4	-3	-0	-0	-4	-0	-1	-4	18
4	0	4	3	4	3	5	5	2	4	2	4	4	3	4	5	1	5	
-2	-0	-3	-3	-0	-2	-5	-3	-1	-1	-1	-1	-4	-0	-4	-2	-1	-1	36
0	4	4	2	4	4	2	5	5	3	4	4	3	4	5	1	5	5	
-0	-2	-1	-0	-2	-3	-1	-4	-5	-2	-1	-0	-1	-3	-1	-1	-3	-4	54
1	4	4	2	5	1	4	5	3	5	4	3	4	5	1	4	4	3	
-0	-2	-0	-2	-0	-1	-2	-1	-3	-3	-2	-2	-3	-3	-1	-2	-4	-2	72
5	5	3	4	5	2	4	1	5	5	3	4	2	4	4	4	2	3	
-2	-0	-1	-1	-4	-1	-3	-0	-5	-3	-1	-0	-2	-2	-4	-1	-0	-2	90

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-3
(Minuends 0-9)

8	4	9	6	9	2	8	7	8	5	9	7	4	1	8	7	9	5	
-1	-0	-2	-5	-4	-2	-4	-2	-4	-0	-6	-5	-3	-0	-2	3	-3	-4	18
9	6	9	6	8	5	9	1	9	7	8	5	8	6	9	4	5	7	
-5	-1	-7	-5	-8	-1	-9	-1	-8	-7	-0	-2	-7	-4	-1	-2	-3	-3	36
8	2	8	6	9	7	8	5	9	2	9	6	8	4	8	3	9	6	
-0	-0	-3	-1	-3	-6	-3	-5	-2	-1	-0	-3	-4	-1	-7	-2	-5	-6	54
8	3	8	7	8	3	8	2	9	7	9	4	6	7	2	9	6	8	
-5	-0	-5	-5	-8	-3	-6	-0	-7	-5	-4	-4	-0	-1	-2	-3	-2	-6	72
4	9	7	8	3	6	9	7	9	5	9	6	8	4	7	9	3	9	
-0	-4	-2	-1	-1	-5	-9	-4	-1	-5	-6	-3	-3	-2	-0	-2	-3	-8	90

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-4
(Minuends 0-12)

10	12	5	10	8	11	4	10	6	11	12	6	9	12	9	12	
- 3	- 4	-3	- 2	-3	- 4	-3	- 7	-2	- 6	- 6	-3	-4	- 3	-9	- 3	16
11	12	10	12	10	4	11	11	10	11	9	12	8	9	8	5	
- 2	- 7	- 9	- 9	- 4	-2	- 0	- 7	- 5	- 9	-1	- 8	-2	-6	-3	-4	32
7	11	6	9	11	8	12	11	4	8	11	12	11	10	12	9	
-4	- 5	-3	-3	- 9	-6	- 5	- 4	-0	-8	- 8	- 4	- 5	- 8	- 0	-6	48
10	10	7	12	10	9	6	9	12	5	9	3	9	6	7	6	
- 5	- 2	-5	- 5	- 4	-4	-4	-7	- 3	-2	-8	-2	-3	-2	-3	-0	64
11	7	10	8	8	9	11	12	10	11	8	9	10	8	9	7	
- 3	-2	- 8	-4	-6	-2	- 7	- 7	- 6	- 6	-0	-5	- 3	-5	-8	-7	80

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-5

(Minuends 0-18)*

11	5	14	11	10	15	18	15	13	17	15	12	16	6	10	13	13	8	
-5	-4	-9	-4	-5	-6	-9	-7	-8	-8	-8	-8	-9	-1	-8	-7	-5	-5	18
14	17	9	6	10	16	14	7	11	10	12	13	16	9	5	16	14	12	
-6	-9	-8	-4	-2	-8	-5	-1	-8	-3	-9	-6	-9	-6	-1	-7	-5	-4	37
8	12	4	4	13	11	15	15	4	11	9	17	10	12	8	8	12	7	
-7	-5	-2	-4	-8	-4	-9	-8	-3	-7	-7	-8	-6	-7	-3	-8	-6	-3	55
10	16	9	11	8	11	10	18	10	7	13	12	13	12	6	9	16	11	
-1	-8	-4	-2	-5	-3	-7	-9	-6	-2	-6	-3	-4	-4	-5	-5	-7	-6	73
15	14	8	6	9	12	14	7	11	10	15	14	17	14	15	11	11	12	
-6	-7	-2	-2	-2	-5	-8	-5	-9	-9	-6	-8	-9	-6	-7	-3	-5	-8	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-5a

(Minuends 0-18) *
horizontal

8-8= 11-3= 13-7= 9-5= 16-7= 10-6= 18-9= 16-9= 13-4= 10-3= 10

17-8= 9-3= 10-9= 7-2= 15-9= 11-7= 13-6= 14-5= 10-7= 4-4= 20

6-2= 11-1= 11-2= 8-7= 11-5= 15-6= 14-6= 10-1= 7-3= 13-5= 31

14-5= 16-7= 8-3= 13-9= 15-7= 5-1= 6-5= 10-4= 12-8= 14-8= 41

12-3= 4-3= 11-8= 11-9= 7-4= 10-6= 11-4= 10-8= 12-5= 16-8= 51

4-2= 14-9= 8-2= 9-8= 9-4= 12-5= 5-4= 14-7= 17-9= 12-9= 61

16-8= 12-8= 12-4= 11-6= 12-7= 6-1= 14-6= 9-6= 12-4= 9-7= 71

15-6= 12-9= 13-6= 15-8= 7-5= 7-1= 18-9= 13-8= 16-9= 9-2= 81

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

S-6

see-write

Add & Subtract Facts

8	10	2	8	12	11	3	9	4	11	15	14	5	8	17	14	5	5	
+3	- 9	+3	+2	- 8	- 5	+8	+9	+2	- 3	- 7	- 6	+5	+7	- 9	- 8	+4	-6	26
10	4	7	6	12	14	16	0	5	6	9	12	3	6	13	7	10	6	
- 9	+8	-5	+5	- 5	- 7	- 7	+8	+9	+6	-5	- 4	+5	+7	- 6	-2	- 6	+7	50
4	7	16	12	8	3	9	17	11	1	5	15	4	8	9	2	12	14	
+4	+9	- 8	- 7	-8	+6	+2	- 8	- 7	+5	+8	- 9	-4	-7	+8	+7	- 4	- 5	72
9	16	7	0	8	13	3	3	13	10	15	17	6	7	5	5	9	12	
-6	- 9	+4	+6	-5	- 5	+9	+7	- 7	- 8	- 8	- 9	+9	+7	+1	-4	+1	- 7	96
7	5	10	0	3	18	15	9	11	15	2	9	14	15	8	0	8	18	
+4	-4	- 5	+9	+2	- 9	- 6	+5	- 5	- 6	+6	+6	- 9	- 6	+3	+7	-5	- 9	118

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-7
(2d-1d, 2d-2d no reg.)

16	92	28	73	89	73	13	76	16	48	14	67	26	94	17	
- 4	-32	- 8	-32	-35	-21	- 0	-61	- 3	- 0	- 3	-17	- 3	-83	- 0	30
26	44	49	88	98	14	87	17	74	32	49	76	24	96	44	
- 0	- 4	-32	-38	-64	- 1	-63	- 5	-62	- 1	- 7	-14	- 2	-25	- 3	60
36	73	56	97	64	47	38	13	67	75	25	99	14	19	37	
- 5	- 1	-24	-74	-54	-36	- 3	- 3	- 4	-64	-11	-47	- 3	- 6	- 7	90
49	57	28	48	65	12	63	89	68	16	39	18	99	46	75	
- 5	- 3	-13	-27	-32	- 2	-13	-59	- 4	- 6	-27	- 8	-18	-23	- 4	120

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-7a
(2d-1d, no reg.)*

24	17	35	18	17	66	18	15	18	65	12	18	25	16	37	
- 4	- 2	- 5	- 4	- 4	- 6	- 5	- 5	- 1	- 0	- 1	- 3	- 4	- 3	- 1	30
29	37	18	15	41	36	49	18	16	55	47	26	16	39	14	
- 3	- 3	- 6	- 3	- 0	- 1	- 4	- 2	- 1	- 2	- 2	- 4	- 2	- 0	- 2	60
12	13	58	17	26	14	37	69	35	18	13	43	34	59	22	
- 2	- 3	- 0	- 4	- 0	- 3	- 7	- 6	- 1	- 8	- 3	- 0	- 4	- 1	- 0	90
14	46	13	37	15	23	17	49	23	56	46	18	16	19	66	
- 3	- 4	- 1	- 3	- 2	- 2	- 7	- 7	- 2	- 3	- 6	- 3	- 5	- 8	- 4	120
74	89	27	38	15	58	29	39	25	58	47	26	36	14	65	
- 4	- 5	- 4	- 8	- 0	- 6	- 0	- 5	- 5	- 1	- 2	- 2	- 0	- 3	- 5	150

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

S-7b

see-write

(2d-2d, no reg)*

97	88	92	89	69	89	57	48	58	36	
-51	-25	11	-78	-31	-56	-22	-16	-42	-12	20
54	68	76	49	95	83	35	74	58	97	
-32	-47	-32	-24	-75	-42	-13	-51	-13	-25	40
92	89	73	87	64	98	25	94	49	68	
-32	-35	-21	-63	-54	-64	-11	-83	-32	-21	60
75	76	63	99	76	88	47	67	97	60	
-64	-14	-13	-47	-61	-38	-36	-17	-74	-20	80
89	48	65	96	73	56	81	99	57	69	
-59	-27	-32	-25	-32	-24	-61	-57	-45	-53	100

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-8
(2d-1d, 2d-2d, w/reg.)

60	20	42	31	67	43	90	54	80	23	74	85	
- 2	-19	- 6	-17	-19	-27	- 1	- 9	-56	- 9	- 5	-16	23
36	64	53	32	62	70	97	36	82	45	53	71	
- 9	-17	- 5	- 4	-35	- 6	-48	- 8	-49	- 8	-14	-54	47
92	86	73	70	85	62	95	98	26	64	50	82	
- 9	-57	-54	-38	- 9	-45	- 7	-19	- 8	- 7	-24	- 3	71
46	40	53	73	85	61	87	20	88	73	44	61	
- 7	- 8	-28	- 6	-38	-58	-28	- 7	- 9	-16	- 6	-53	93
85	80	25	27	45	40	31	94	32	51	74	53	
-17	- 5	- 6	- 9	-38	-17	- 6	-85	- 5	- 5	-27	-28	115

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

S-8a

see-write

(2d-1d, w/reg.)

40	91	51	13	31	80	21	65	73	32	14	70	
- 4	- 7	- 4	- 7	- 9	- 3	- 2	- 7	- 4	- 8	- 8	- 9	22
53	45	85	61	92	60	83	36	12	64	80	90	
- 8	- 8	- 9	- 7	- 9	- 2	- 4	- 9	- 6	- 7	- 5	- 1	46
20	73	46	27	12	62	31	26	65	82	70	98	
- 7	- 6	- 7	- 9	- 5	- 8	- 6	- 8	- 6	- 3	- 6	- 9	69
12	53	61	44	74	40	97	32	80	51	12	70	
- 4	- 5	- 8	- 6	- 5	- 8	- 8	- 7	- 8	- 5	- 6	- 3	91
41	91	27	51	34	54	32	52	23	75	82	10	
- 2	- 9	- 8	- 4	- 5	- 9	- 4	- 7	- 9	- 7	- 9	- 2	114

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-8b

(2d-2d, w/reg.)

73 -54	45 -38	40 -17	54 -17	94 -85	70 -38	82 -67	71 -22	90 -19	22 -14	62 -23	71 -46	21
51 -39	32 -16	84 -48	51 -45	97 -39	71 -14	45 -16	96 -79	60 -15	92 -58	60 -46	83 -17	44
50 -33	83 -76	74 -69	96 -17	34 -26	73 -15	93 -29	46 -38	90 -12	43 -28	51 -43	95 -29	64
98 -19	70 -24	62 -45	61 -58	82 -49	31 -17	85 -17	87 -28	43 -27	20 -19	53 -28	97 -48	86
61 53	86 -57	64 -17	85 -38	95 -67	62 -35	85 -16	80 -56	53 -14	73 -16	71 -54	67 -19	109

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-9
(2d-1d, 2d-2d, no reg. & reg.)

87	92	89	64	90	73	16	27	45	73	53	76	
-28	-32	- 5	-17	- 1	-32	- 5	- 9	-38	- 6	-28	-61	22
18	97	85	68	20	15	85	60	94	47	85	70	
- 8	-74	-38	-21	- 7	- 3	- 9	-20	-85	- 6	- 8	-24	44
44	49	16	51	60	53	86	88	94	12	71	16	
- 6	-32	- 3	- 5	- 2	-14	-57	-38	-83	- 3	-54	- 6	67
53	87	95	25	92	18	73	13	14	26	16	65	
- 8	-63	-47	-11	- 9	- 1	-54	- 2	- 8	- 8	- 1	-32	90
80	17	73	82	98	85	20	69	16	40	98	43	
-56	- 5	-21	- 3	-64	-17	-19	-23	- 0	- 8	-19	-27	113

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

S-10

see-write

(3d-1d, 3d-2d, no reg.)

672 - 10	646 - 23	526 - 5	629 - 18	855 - 23	937 - 16	686 - 10	608 - 7	649 - 26	27
722 - 11	417 - 4	851 - 40	828 - 5	739 - 15	846 - 6	527 - 2	377 - 17	789 - 73	54
547 - 5	939 - 24	907 - 1	569 - 19	618 - 3	745 - 4	468 - 2	327 - 10	888 - 66	81
866 - 4	847 - 3	976 - 32	664 - 2	748 - 14	325 - 1	475 - 2	744 - 4	843 - 12	108
939 - 17	648 - 1	649 - 22	303 - 1	973 - 13	904 - 3	215 - 15	534 - 21	886 - 61	135

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-10a
(3d-1d, no reg.)

648 - 3	847 - 6	664 - 2	866 - 5	562 - 1	417 - 4	527 - 7	855 - 4	936 - 4	27
408 - 7	734 - 3	479 - 8	848 - 5	469 - 9	827 - 5	608 - 4	529 - 6	744 - 3	54
672 - 1	239 - 7	935 - 1	846 - 1	727 - 3	615 - 3	844 - 1	623 - 2	972 - 1	81
748 - 1	936 - 3	646 - 2	688 - 2	739 - 1	547 - 2	888 - 6	377 - 4	323 - 2	108
697 - 1	759 - 3	989 - 5	556 - 4	389 - 4	973 - 1	885 - 2	851 - 1	909 - 2	135

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

S-10b

see-write

(3d-2d, no reg.)

779 - 48	827 - 12	925 - 11	658 - 32	834 - 21	446 - 34	557 - 44	943 - 33	642 - 12	27
387 - 76	646 - 12	754 - 53	839 - 22	762 - 21	488 - 55	498 - 64	687 - 65	395 - 74	54
773 - 62	897 - 83	974 - 62	665 - 42	836 - 11	559 - 47	949 - 33	648 - 10	946 - 15	81
289 - 75	937 - 11	769 - 26	486 - 63	628 - 17	479 - 21	688 - 76	854 - 24	349 - 19	108
854 - 40	556 - 10	648 - 23	895 - 23	749 - 24	978 - 68	835 - 15	629 - 10	968 - 51	135

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-11
(3d-1d, 3d-2d, reg.)

672 - 53	461 - 63	648 - 29	722 - 4	343 - 53	331 - 34	647 - 9	866 - 37	547 - 8	27
347 - 58	646 - 18	585 - 9	961 - 34	843 - 7	744 - 6	656 - 67	491 - 3	460 - 7	54
748 - 9	979 - 99	734 - 5	492 - 8	932 - 62	284 - 96	856 - 79	973 - 8	323 - 4	81
972 - 79	936 - 9	672 - 55	635 - 93	995 - 76	847 - 9	851 - 6	532 - 13	936 - 88	108
744 - 19	648 - 39	755 - 26	444 - 27	214 - 6	913 - 4	220 - 8	620 - 67	912 - 9	135

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-11a
(3d-1d, reg.)

558 - 9	723 - 5	711 - 9	735 - 7	647 - 9	846 - 8	287 - 8	414 - 9	626 - 7	27
647 - 8	441 - 3	432 - 8	552 - 3	666 - 9	811 - 4	772 - 9	835 - 7	324 - 8	54
612 - 5	943 - 8	741 - 5	327 - 8	917 - 9	537 - 8	934 - 6	648 - 9	433 - 7	81
971 - 3	833 - 6	855 - 8	971 - 7	782 - 3	947 - 9	662 - 3	423 - 8	623 - 6	108
841 - 5	938 - 9	966 - 7	342 - 6	278 - 9	487 - 8	193 - 7	461 - 3	455 - 6	135

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-11b
(3d-2d, w/reg.)

895 - 76	660 - 28	892 - 59	530 - 89	461 - 74	372 - 84	201 - 39	156 - 32	962 - 83	27
763 - 98	451 - 39	700 - 97	938 - 29	333 - 17	906 - 37	474 - 88	745 - 78	581 - 62	54
840 - 65	654 - 17	153 - 86	993 - 79	505 - 46	245 - 19	922 - 48	803 - 34	227 - 49	80
867 - 38	163 - 94	951 - 29	900 - 25	571 - 94	852 - 73	410 - 96	237 - 19	340 - 57	106
303 - 34	384 - 85	644 - 16	572 - 88	691 - 39	902 - 63	684 - 47	400 - 94	754 - 18	133

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

S-12

see-write

(3d-1d, 3d-2d, no reg. & reg.)

547 - 38	626 - 15	460 - 7	328 - 7	775 - 58	967 - 24	623 - 16	919 - 7	323 - 12	27
869 - 25	418 - 9	491 - 3	835 - 16	978 - 3	648 - 17	535 - 3	423 - 39	640 - 15	54
287 - 5	644 - 59	432 - 66	686 - 4	997 - 78	851 - 7	662 - 62	856 - 8	199 - 73	81
220 - 10	748 - 19	676 - 9	537 - 6	684 - 42	734 - 76	972 - 3	642 - 38	755 - 4	108
782 - 71	278 - 3	971 - 5	552 - 43	836 - 4	932 - 13	735 - 22	196 - 87	990 - 9	135

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-13

(3d-3d, 4d-4d, no reg.)*

674 -562	547 -326	5689 -3276	6088 -4032	648 -427	936 -715	5363 -2141	936 -314	27
4978 -2626	8387 -5112	6657 -4335	408 -302	912 -402	748 -122	843 -700	8232 -6131	55
2989 -1713	460 -250	3651 -2540	5885 -4444	844 -732	972 -641	4842 -3721	4325 -2114	84
866 -624	5659 -1342	931 -220	8989 -7611	6068 -1027	547 -325	526 -126	4324 -1212	112
8285 -2174	734 -123	8294 -4182	527 -416	607 -101	966 -225	535 -324	8053 -1042	139

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-14
(3d-3d, 4d-4d, w/reg.)

4978 -3699	5363 -2795	844 -268	932 -179	722 -344	6041 -3877	5659 -3263	7303 -4889	29
526 -278	907 -348	8001 -5095	7521 -5683	986 -409	9023 -7857	506 -247	935 -746	56
664 -395	7432 -2603	704 -267	5237 -3879	849 -369	756 -198	6503 -2796	430 -144	87
5491 -2673	602 -369	320 -165	8285 -5797	6068 -4289	7371 -2594	6308 -4039	902 -183	116
4324 -3937	201 -109	4032 -3997	303 -116	6657 -5766	745 -188	7007 -3938	5957 -3809	140

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

S-14a

see-write

(3d-3d, w/reg.)

501 -379	926 -178	811 -397	281 -196	624 -135	311 -234	835 -157	606 -357	501 -224	25
910 -326	430 -168	523 -494	750 -293	662 -286	714 -167	800 -544	442 -375	514 -475	49
223 -166	404 -296	743 -365	800 -625	302 -187	655 -476	570 -297	713 -487	636 -288	75
917 -258	823 -449	934 -698	942 -854	711 -645	874 -289	950 -482	610 -379	811 -156	100
848 -799	965 -479	731 -172	902 -269	326 -289	501 -338	665 -498	903 -367	632 -179	125

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

S-14b

see-write

(4d-4d w/ one reg.)*

3825 -2775	8691 -7663	9595 -3267	5929 -3759	6497 -2586	9205 -6144	8323 -6204	28
7160 -4750	6252 -4138	2399 -1645	7921 -5816	9569 -2958	8326 -3074	9399 -1989	55
8788 -4593	5599 -1988	7102 -1030	3026 -1712	6478 -3197	2981 -1669	5207 -2043	83
4075 -1633	5660 -1324	6946 -3662	9983 -3325	8055 -5643	7213 -3182	3791 -1446	111
9437 -1272	8488 -5847	5512 -2381	4210 -3007	6201 -4090	7424 -1622	8846 -3484	139

S-14c

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

(4d-4d, w. reg.)

9524 -2959	2410 -1654	8102 -3214	8125 -1867	7026 -2899	3243 -1998	8643 -6866	27
7160 -4587	6270 -2589	6242 -3388	9348 -1899	7021 -5978	5460 -1773	7186 -1497	55
9337 -4549	6551 -5874	7031 -6676	5710 -4936	9024 -6485	4015 -1668	8313 -5694	80
8550 -4768	7162 -3597	5001 -2719	4503 -3627	9230 -3692	3445 -2586	5001 -3532	106
4100 -2775	8421 -7663	9541 -8857	7104 -4457	8422 -2743	6133 -1965	6113 -4279	132

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

S-15

see-write

(3d-3d, 4d-4d, no reg. & reg.)

8232 -4858	376 -254	6742 -3421	763 -594	2695 -1681	5997 -4898	6705 -3874	981 -470	8981 -5095	33
679 -583	509 -269	6573 -4798	6259 -4008	986 -574	5023 -3139	851 -398	7521 -5083	7398 -4276	65
612 -401	436 -215	5363 -2895	361 -285	900 -379	826 -304	8996 -7421	430 -249	4757 -2311	94
5693 -4491	9407 -6200	576 -203	950 -682	7032 -4889	7371 -2594	439 -237	8291 -3504	832 -676	126
895 -341	548 -299	844 -222	302 -116	707 -300	3765 -2651	4978 -3699	2663 -1331	3006 -2347	157

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-16
(5d-5d w/reg.)*

74356	83303	97763	26831	39382	24231	45076	32231	13273	
-23988	-34886	-45695	-17976	-16895	-14583	-23697	-12874	-12789	42
93284	62365	99392	38263	12027	41526	56273	65395	24601	
-42796	-23887	-45818	-15397	-10989	-23088	-24787	-55808	-10267	84
45404	82322	87523	55396	90321	35269	24372	45294	46275	
-23899	-62487	-27394	-22438	-40687	-12881	-12918	-32967	-23889	129
63509	54357	32398	93424	25275	16594	75017	46273	84832	
-24768	-40869	-12599	-32858	-11489	-17675	-45458	-20887	-40958	173

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-17
Multi-digit numbers
(no reg. & reg.)

534 - 21	245 - 19	74356 -23988	7763 -2522	40 - 7	548 - 5	85 -28	7162 -3597	965 -479	29
9230 -3692	78 - 3	87 -28	500 - 26	527 -416	664 - 4	811 -156	76 -61	942 -854	53
201 - 79	71 - 5	4015 -1668	56 -28	743 -365	3651 -2540	93421 -32857	62 -35	788 - 46	80
53 -28	9541 -8857	857 - 3	748 - 14	936 -249	36 - 9	7106 -1497	32398 -12599	49 -32	107
53 - 5	652 - 3	966 -225	67396 -55807	763 - 58	64 -17	547 -325	8989 -7611	49 - 7	134

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

S-18

Add & Subtract
Multi-digit nos.
(No reg. & reg.)

648 +362	27 -14	4296 -2177	73 -28	3792 +2264	46 +23	378 -188	56437 -23746	2746 +2758	30
2797 -1454	365 -187	866 + 23	231 +364	854 - 9	156 + 97	60 - 4	2163 4395 +3010	49 +27	57
33 -22	24 + 8	649 -240	635 + 5	648 -427	43781 -20462	526 + 3	688 - 89	24 + 3	83
356 292 152 +268	42 +39	615 - 3	951 - 57	291 +308	103 - 20	9696 -2707	39 - 6	496 +374	109
936 + 2	501 - 24	349 +273	37 +75	47963 -25494	92 -74	238 +275	7246 +2452	54 - 9	137

MULTIPLICATION

On loaded sheets every other item is the new fact. For example, on M-2L, every other item is x2 and the other items are x1, x0.

M-1	x0's, 1's
M-2L	x2's loaded
M-2C	x2's cumulative
M-3L	x3's loaded
M-3C	x3's cumulative
M-4L	x4's loaded
M-4C	x4's cumulative
M-5L	x5's loaded
M-5C	x5's cumulative
M-6L	x6's loaded
M-6C	x6's cumulative
M-7L	x7's loaded
M-7C	x7's cumulative
M-8L	x8's loaded
M-8C	x8's cumulative
M-9L	x9's loaded
M-9C	x9's cumulative*
M-9M	Mastery*
M-9Ma	Mastery - Horizontal
M-10	Add, Subtract, Multiply Facts
M-11	2d x 1d, 2d x 2d (no reg.)
M-11a	2d x 1d (no reg.)
M-11b	2d x 2d (no reg.)
M-12	2d x 1d, 2d x 2d (w/reg.)
M-12a	2d x 1d (w/reg.)

M-12b	2d x 2d (w/reg.)
M-13	2d x 1d, 2d x 2d (no reg. & reg.)
M-14	3d x 1d, 3d x 2d (no reg.)*
M-15	3d x 1d, 3d x 2d (w/reg.)*
M-15a	3d x 1d (w/reg.)*
M-15b	3d x 2d (w/reg.)*
M-16	3d x 1d, 3d x 2d (no reg. & reg.)*
M-17	3d x 3d, 4d x 4d (w/reg.)
M-18	Multi-digit nos. (no reg. & reg.)

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-1

see-write

(X 0's, 1's)

4	8	2	0	6	9	7	0	3	0	0	1	1	0	8	0	
x0	x0	x1	x9	x1	x0	x1	x0	x1	x4	x2	x6	x4	x6	x1	x8	(16)
1	5	1	1	0	1	5	1	1	3	0	1	0	4	0	1	
x0	x0	x3	x8	x3	x0	x1	x1	x9	x0	x7	x2	x5	x1	x1	x5	(32)
6	1	5	1	9	0	1	5	0	7	7	5	0	1	3	6	
x0	x3	x1	x6	x1	x8	x1	x0	x9	x0	x1	x1	x6	x7	x1	x1	(48)
8	0	3	1	0	1	1	9	4	1	2	0	0	2	0	0	
x1	x0	x0	x0	x7	x2	x4	x0	x1	x9	x1	x2	x5	x0	x4	x1	(64)
7	6	9	3	1	0	0	0	2	3	0	0	1	1	0	1	
x1	x0	x1	x0	x0	x8	x5	x2	x1	x1	x1	x6	x2	x8	x9	x5	(80)

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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M-2L

see-write

(thru X 2's)

1	5	9	2	0	2	4	6	0	2	0	4	1	3	8	2	
x8	x2	x1	x2	x2	x9	x1	x2	x9	x8	x6	x2	x4	x2	x0	x4	(20)
0	2	0	9	1	0	9	7	5	2	0	1	5	2	0	2	
x0	x1	x5	x2	x6	x2	x0	x2	x1	x6	x4	x2	x0	x5	x3	x7	(41)
1	2	0	2	0	1	7	2	2	2	6	9	2	0	7	7	
x7	x2	x7	x5	x8	x2	x0	x2	x0	x1	x1	x2	x1	x2	x1	x2	(60)
0	2	1	2	1	6	8	2	0	3	1	2	3	2	4	5	
x1	x0	x5	x9	x9	x2	x1	x8	x0	x2	x2	x4	x1	x7	x0	x2	(81)
6	2	0	1	1	2	2	2	1	4	5	2	7	2	1	2	
x0	x3	x9	x2	x7	x5	x1	x3	x1	x2	x1	x0	x0	x9	x6	x1	(99)

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-2C

(thru X 2's)

3	6	4	0	1	6	0	8	7	2	3	5	0	1	1	1	
x2	x1	x1	x0	x6	x2	x6	x0	x1	x3	x1	x1	x9	x0	x3	x2	
																17
2	3	2	2	2	1	2	7	5	0	9	4	0	5	2	1	
x1	x0	x0	x4	x6	x2	x5	x2	x0	x5	x2	x2	x3	x2	x4	x8	
																38
1	0	1	1	0	2	4	2	9	0	1	2	0	9	1	2	
x4	x7	x7	x1	x2	x7	x0	x2	x0	x8	x5	x0	x2	x0	x9	x4	
																55
9	4	0	1	0	6	6	0	1	0	0	2	1	7	2	4	
x1	x2	x8	x2	x4	x2	x0	x0	x4	x5	x2	x8	x7	x2	x3	x0	
																74
8	1	0	2	0	5	2	0	6	3	1	7	1	3	6	1	
x1	x6	x7	x7	x9	x2	x1	x2	x0	x1	x9	x1	x6	x2	x1	x3	
																92

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-3L
(thru X 3's)

9	1	8	5	1	2	5	9	3	6	3	8	3	1	4	0	
x3	x5	x3	x1	x3	x1	x3	x2	x4	x2	x2	x1	x3	x2	x3	x8	(23)
3	9	6	1	3	1	7	2	3	2	3	3	3	0	2	7	
x6	x1	x3	x1	x9	x7	x3	x9	x8	x8	x6	x1	x7	x4	x3	x2	(49)
3	2	5	2	7	9	2	3	8	4	1	2	3	1	6	2	
x8	x6	x3	x7	x3	x0	x3	x2	x3	x2	x3	x2	x7	x3	x3	x1	(73)
3	4	4	8	3	0	3	1	3	1	9	0	3	5	6	3	
x9	x1	x3	x0	x4	x9	x3	x3	x5	x0	x3	x0	x2	x3	x0	x2	(95)
8	3	5	4	6	3	0	9	0	3	2	7	1	3	5	3	
x2	x8	x2	x3	x1	x5	x2	x3	x6	x9	x1	x3	x5	x6	x1	x4	(121)

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-3C

(thru X 3's)

9	0	2	0	1	3	1	6	3	3	1	7	1	3	3	6	
x1	x3	x9	x4	x3	x0	x3	x1	x2	x4	x6	x1	x9	x1	x6	x0	(19)
5	3	0	2	0	1	9	8	3	0	4	7	2	7	1	2	
x2	x9	x9	x7	x7	x6	x3	x1	x0	x1	x0	x3	x3	x2	x7	x8	(42)
0	1	0	4	6	6	0	1	3	0	4	9	1	3	7	2	
x5	x4	x0	x3	x0	x2	x4	x2	x8	x8	x2	x1	x2	x7	x0	x4	(62)
3	0	2	1	0	5	9	2	4	2	7	2	0	1	1	0	
x2	x2	x0	x5	x8	x3	x0	x2	x0	x2	x3	x3	x2	x1	x7	x7	(80)
2	0	1	3	2	5	0	4	6	9	0	5	7	8	2	1	
x1	x1	x8	x3	x4	x2	x3	x2	x3	x2	x3	x0	x2	x3	x5	x2	(102)

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-4L
(thru X 4's)

1	0	3	9	4	3	5	2	7	4	8	9	9	4	1	2	
x4	x8	x4	x3	x4	x5	x4	x2	x4	x2	x4	x1	x4	x3	x4	x5	(26)
4	2	4	6	4	0	4	1	4	4	4	5	4	3	6	2	
x3	x1	x4	x0	x5	x4	x6	x2	x7	x0	x8	x0	x9	x9	x4	x3	(51)
4	6	6	3	4	5	8	3	4	7	4	2	4	3	4	8	
x7	x1	x4	x2	x9	x1	x4	x1	x6	x3	x8	x6	x3	x6	x2	x3	(78)
4	1	2	2	4	0	4	5	9	1	7	9	5	1	4	0	
x5	x3	x4	x1	x4	x7	x1	x3	x4	x8	x4	x2	x4	x4	x4	x5	(102)
4	3	4	2	3	2	9	1	8	1	7	0	4	8	4	5	
x9	x7	x8	x7	x4	x3	x4	x2	x4	x6	x4	x1	x6	x1	x4	x2	(129)

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-4C

(thru X 4's)

3	5	0	5	4	1	1	1	2	4	3	2	2	3	9	2	
x1	x1	x9	x3	x4	x0	x3	x2	x9	x1	x7	x8	x1	x0	x4	x0	(22)
2	3	1	2	8	7	6	5	0	9	6	4	4	0	5	2	
x6	x4	x2	x5	x3	x2	x4	x0	x3	x2	x3	x7	x2	x3	x2	x4	(48)
1	0	2	4	1	3	0	1	4	1	0	2	2	8	2	4	
x8	x1	x1	x9	x4	x1	x7	x7	x6	x1	x2	x3	x7	x4	x2	x0	(68)
7	5	0	1	2	4	0	3	9	1	6	2	7	3	1	7	
x4	x3	x8	x5	x0	x4	x2	x2	x0	x9	x4	x4	x0	x7	x2	x4	(90)
0	3	9	1	0	6	6	3	4	0	1	0	4	0	3	2	
x8	x8	x4	x2	x4	x2	x0	x4	x3	x0	x4	x5	x9	x2	x5	x8	(114)

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-5L

see-write

(thru X 5's)

5	3	1	3	5	3	2	3	5	7	3	3	8	0	5	1	
x7	x2	x5	x4	x6	x4	x5	x1	x3	x3	x5	x3	x5	x3	x2	x2	(27)
5	2	5	0	9	8	6	7	5	5	5	4	4	2	5	7	
x9	x7	x8	x5	x5	x3	x5	x4	x5	x0	x1	x1	x5	x3	x4	x0	(53)
7	3	9	3	6	7	8	3	1	3	3	3	5	5	2	2	
x5	x7	x5	x6	x5	x2	x5	x8	x5	x9	x5	x0	x1	x4	x5	x1	(91)
2	4	5	4	4	4	5	1	5	1	5	0	5	1	9	1	
x5	x9	x6	x7	x5	x1	x5	x8	x7	x3	x8	x1	x4	x6	x5	x2	(117)
1	0	2	8	7	2	5	4	5	9	5	9	5	9	8	1	
x5	x4	x5	x4	x5	x6	x2	x8	x4	x2	x3	x4	x1	x0	x5	x4	(144)

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-5C

see-write

(thru X 5's)

2	5	3	8	5	0	2	0	1	5	4	9	8	3	5	0	
x1	x2	x9	x4	x3	x9	x7	x4	x6	x2	x7	x3	x1	x0	x7	x1	25
7	1	2	7	4	1	5	2	3	0	4	5	0	1	0	4	
x3	x5	x3	x2	x8	x7	x8	x8	x5	x2	x9	x4	x5	x4	x0	x3	50
6	6	0	7	1	9	3	0	4	4	9	7	1	8	3	7	
x0	x2	x4	x5	x2	x4	x8	x8	x5	x3	x1	x4	x2	x5	x7	x0	75
2	1	9	3	0	6	4	3	1	0	5	5	7	9	2	5	
x5	x9	x0	x2	x2	x5	x4	x0	x5	x8	x1	x3	x4	x0	x2	x9	97
8	2	9	2	0	1	4	3	1	0	3	1	5	4	2	0	
x4	x7	x5	x5	x2	x1	x6	x5	x7	x7	x1	x4	x6	x9	x1	x1	121

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
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M-6L

see-write

(thru X 6's)

7	6	5	6	2	6	3	5	2	4	8	6	2	6	5	1	
x5	x3	x1	x8	x2	x1	x2	x6	x9	x6	x5	x0	x8	x5	x6	x6	(26)
2	6	5	6	2	3	3	0	4	6	6	6	7	6	4	8	
x1	x2	x5	x7	x7	x6	x4	x6	x8	x6	x5	x9	x2	x4	x4	x6	(56)
4	9	0	6	4	6	5	6	2	7	5	6	9	6	5	6	
x2	x6	x2	x0	x3	x8	x2	x5	x6	x6	x4	x7	x5	x4	x7	x9	(85)
9	4	3	6	2	5	2	6	5	2	8	9	5	6	3	6	
x2	x6	x5	x3	x3	x6	x4	x1	x4	x6	x4	x6	x9	x2	x3	x6	(114)
0	1	4	0	3	0	2	1	3	5	3	6	4	6	5	4	
x3	x6	x5	x6	x9	x6	x5	x6	x4	x6	x8	x2	x6	x3	x3	x6	(141)

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
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ORLANDO, FLORIDA

see-write

M-6C

(thru X 6's)

6	8	5	2	6	2	4	5	4	9	5	4	2	6	9	6	
x4	x5	x4	x4	x8	x0	x6	x2	x7	x2	x5	x3	x3	x5	x4	x2	(29)
3	3	0	5	7	6	4	3	5	4	2	1	3	3	2	4	
x6	x8	x4	x6	x5	x3	x7	x1	x8	x0	x6	x4	x2	x9	x4	x6	(55)
5	2	3	0	8	9	6	1	3	3	4	6	0	2	9	2	
x7	x6	x5	x4	x4	x5	x3	x4	x2	x9	x3	x5	x5	x1	x2	x5	(82)
5	2	5	6	6	4	6	3	6	4	5	4	5	3	5	0	
x5	x3	x3	x2	x3	x2	x2	x0	x8	x3	x3	x6	x1	x6	x9	x3	(110)
5	4	3	5	6	1	2	3	4	8	2	8	3	2	9	1	
x4	x5	x6	x6	x4	x5	x5	x5	x9	x6	x3	x5	x8	x0	x6	x2	(138)

OCPS

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M-7L

see-write

(thru X 7's)

3 x2	7 x3	5 x3	7 x2	9 x2	7 x5	7 x7	8 x6	7 x1	2 x4	9 x7	1 x4	7 x4	3 x5	7 x5	9 x2	(28)
6 x3	7 x8	4 x1	7 x9	3 x2	5 x6	2 x7	8 x4	9 x7	4 x2	6 x4	0 x7	5 x1	3 x7	6 x3	4 x7	(55)
3 x6	7 x6	2 x6	7 x7	2 x3	5 x7	2 x6	6 x7	1 x3	7 x0	6 x2	3 x7	5 x3	7 x5	4 x5	6 x7	(84)
9 x5	8 x7	6 x2	7 x6	3 x6	7 x7	3 x8	7 x0	7 x4	9 x7	6 x8	4 x3	1 x7	8 x5	5 x7	9 x4	(114)
7 x7	4 x6	7 x9	6 x5	7 x2	4 x5	2 x7	7 x5	7 x1	3 x3	0 x7	5 x6	7 x3	5 x6	6 x7	0 x5	(142)

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
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ORLANDO, FLORIDA

M-7C

see-write

(thru X 7's)

7	2	4	7	3	6	9	3	1	0	1	9	2	3	7	8	
x4	x6	x5	x2	x7	x4	x4	x3	x3	x7	x7	x6	x0	x8	x1	x5	(26)
4	7	3	2	1	6	2	5	3	4	5	7	7	3	7	0	
x9	x0	x5	x5	x5	x4	x7	x6	x6	x5	x4	x5	x6	x4	x3	x3	(54)
3	5	4	5	5	4	6	3	4	6	4	6	6	8	5	2	
x6	x1	x6	x7	x3	x3	x8	x0	x7	x2	x2	x3	x2	x7	x3	x3	(82)
7	6	2	9	2	7	0	6	4	3	7	3	1	3	6	9	
x4	x9	x5	x2	x1	x6	x5	x5	x3	x9	x8	x8	x4	x2	x3	x5	(110)
0	3	2	7	5	3	4	9	6	4	2	3	3	1	1	2	
x4	x5	x6	x9	x7	x1	x1	x3	x7	x6	x4	x9	x2	x7	x4	x6	(135)

OCPS

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M-8L

see-write

(thru X 8's)

3	8	3	9	5	6	9	8	2	8	9	3	3	1	5	8	
x8	x8	x4	x8	x8	x8	x2	x1	x7	x6	x4	x8	x2	x8	x1	x0	(27)
6	8	6	2	7	8	4	0	3	8	2	8	6	8	7	8	
x5	x3	x2	x8	x6	x7	x0	x8	x5	x9	x3	x2	x5	x5	x0	x4	(55)
7	4	2	8	7	8	3	8	5	8	2	6	2	0	5	8	
x4	x8	x6	x1	x3	x4	x9	x7	x4	x6	x7	x8	x5	x8	x9	x3	(85)
4	9	9	8	3	3	8	2	7	7	3	8	3	5	9	8	
x1	x8	x5	x5	x2	x8	x7	x8	x5	x8	x9	x0	x3	x8	x3	x2	(113)
5	4	1	1	6	8	8	8	5	8	0	4	4	0	7	7	
x6	x8	x4	x8	x2	x6	x5	x4	x3	x3	x5	x8	x6	x8	x5	x8	(141)

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-8C

(thru X 8's)

4	2	6	2	4	9	6	8	1	8	7	3	3	0	8	5	
x3	x3	x5	x7	x8	x4	x2	x4	x3	x0	x7	x6	x8	x4	x3	x6	(28)
6	8	4	3	7	5	8	4	2	1	1	8	3	3	2	4	
x3	x4	x7	x1	x3	x8	x7	x0	x6	x4	x7	x6	x2	x9	x4	x6	(54)
9	4	3	5	5	7	2	3	6	0	8	7	8	9	6	3	
x3	x1	x1	x8	x7	x9	x6	x5	x8	x4	x4	x2	x8	x5	x3	x2	(82)
3	7	3	4	0	6	0	7	2	8	9	2	6	7	9	5	
x8	x8	x9	x3	x8	x5	x5	x6	x1	x9	x2	x5	x9	x4	x8	x4	(111)
5	7	8	6	6	4	2	6	4	3	6	8	4	5	5	4	
x3	x8	x7	x2	x3	x2	x8	x2	x7	x0	x8	x1	x3	x3	x7	x6	(140)

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-9L

see-write

(thru X 9's)

8	3	6	4	4	9	5	2	0	7	6	0	5	5	2	9	
x4	x9	x3	x9	x7	x9	x7	x9	x4	x9	x5	x9	x6	x9	x8	x8	(30)
8	9	2	1	5	9	9	9	2	8	5	9	6	6	1	7	
x2	x7	x3	x9	x9	x2	x3	x0	x3	x9	x8	x5	x2	x9	x3	x3	(57)
9	1	0	3	9	8	7	0	9	9	1	7	9	3	9	4	
x5	x4	x9	x8	x9	x7	x9	x8	x1	x7	x9	x9	x5	x6	x7	x3	(84)
3	9	3	3	3	5	4	4	6	8	5	9	8	2	1	9	
x5	x2	x1	x9	x2	x9	x2	x9	x9	x9	x3	x6	x3	x9	x8	x4	(112)
2	9	7	9	9	3	5	8	6	1	4	6	0	5	8	9	
x5	x0	x6	x7	x5	x9	x4	x9	x8	x9	x7	x9	x4	x9	x5	x0	(140)

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-9C

see-write

(thru X 9's)*

7	7	0	3	9	7	5	3	5	9	8	4	5	5	8	4	
x6	x3	x3	x8	x8	x7	x9	x6	x1	x0	x5	x6	x7	x3	x9	x3	(29)
3	5	4	6	2	4	1	6	6	8	7	6	5	2	5	5	
x0	x9	x7	x2	x3	x2	x9	x3	x2	x7	x8	x9	x3	x3	x3	x4	(57)
7	6	2	4	9	8	2	7	0	0	6	0	4	9	3	7	
x4	x9	x5	x9	x2	x9	x1	x6	x9	x5	x5	x8	x3	x1	x9	x8	(84)
9	1	3	6	9	9	8	7	8	0	9	6	3	2	7	3	
x7	x4	x2	x3	x5	x2	x8	x2	x4	x4	x6	x8	x5	x6	x9	x9	(113)
3	4	9	9	6	8	4	7	2	3	3	8	9	1	1	2	
x1	x1	x9	x3	x7	x2	x6	x9	x4	x9	x2	x6	x3	x7	x4	x6	(139)

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-9M

(Mastery)*

7	5	1	9	6	6	7	2	7	5	6	7	0	9	3	8	
x6	x7	x9	x8	x5	x3	x9	x4	x3	x3	x3	x4	x8	x5	x9	x6	29
6	4	9	5	3	3	4	8	2	9	8	5	8	9	8	7	
x9	x3	x2	x5	x2	x8	x4	x7	x5	x1	x8	x8	x6	x4	x1	x8	58
7	3	9	7	6	6	9	7	8	6	1	5	9	5	8	3	
x2	x1	x3	x7	x8	x2	x9	x5	x4	x9	x7	x9	x9	x2	x9	x3	87
1	3	4	2	8	1	9	9	2	9	4	5	7	9	6	6	
x4	x6	x7	x3	x8	x8	x6	x4	x6	x0	x8	x6	x5	x7	x6	x7	115
2	5	3	9	3	8	8	4	4	2	3	2	8	6	4	2	
x8	x4	x9	x7	x5	x2	x3	x6	x2	x9	x7	x7	x5	x4	x0	x2	144

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-9Ma
Mastery-Horizontal*

8x6=____	3x9____	9x5____	0x8=____	7x4=____	6x3=____	5x3=____	2x4=____	14
7x3=____	7x9=____	6x3=____	6x5=____	9x8=____	1x9=____	5x7=____	7x6=____	29
7x8=____	8x1=____	9x4=____	8x6=____	5x8=____	2x5=____	8x8=____	2x5=____	44
8x7=____	4x4=____	3x8=____	3x2=____	5x5=____	9x2=____	4x3=____	6x9=____	59
3x3=____	8x9=____	5x2=____	9x9=____	5x9=____	1x7=____	6x9=____	8x4=____	73
7x5=____	9x9=____	6x2=____	6x8=____	7x7=____	9x3=____	3x1=____	7x2=____	88
6x7=____	6x6=____	9x7=____	7x5=____	5x6=____	4x8=____	9x0=____	2x6=____	103
9x4=____	9x6=____	1x8=____	8x8=____	2x3=____	4x7=____	3x6=____	1x4=____	116
2x2=____	4x0=____	6x4=____	8x5=____	2x7=____	3x7=____	2x9=____	4x2=____	129

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-10
(Add, Sub. & Mult. Facts)

5 +8	9 +2	16 - 7	9 x8	2 x6	11 - 8	14 - 9	6 x4	8 +7	9 -6	3 x2	7 +7	2 -0	4 +7	18 - 9	23
6 +8	5 x7	9 +6	2 +8	8 x9	9 +4	5 x6	12 - 4	3 x0	13 - 5	5 +4	8 x8	17 - 9	3 x9	10 - 2	47
17 - 9	3 x9	10 - 2	4 +0	9 +8	8 x7	16 - 7	4 x3	15 - 8	5 +6	2 x1	14 - 8	13 - 6	9 +3	6 +4	69
11 - 5	9 x7	6 x8	9 -3	8 x4	4 +3	3 +8	8 -2	6 x9	8 -2	10 - 7	9 x4	4 x7	8 -5	3 +2	91
3 x6	8 +4	9 -1	6 -2	7 +2	6 x6	6 +7	2 x2	7 x8	12 - 8	15 - 7	9 x6	3 x7	7 +1	5 +5	114

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-11
(2dx1d, 2dx2d, no reg.)

81 x 8	21 x26	92 x23	74 x 2	63 x 3	83 x32	92 x 4	86 x11	26
72 x34	12 x 4	31 x 7	52 x24	32 x14	42 x33	20 x 4	81 x 5	51
51 x 9	13 x23	41 x 6	91 x76	43 x21	71 x43	57 x 1	81 x 7	76
61 x99	58 x11	41 x44	11 x 8	60 x 9	53 x 2	23 x13	24 x 2	100

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-11a

see-write

(2dx1d, no reg.)

92 x 4	62 x 4	71 x 7	81 x 9	46 x 1	51 x 8	71 x 9	81 x 8	83 x 3	75 x 0	27
89 x 1	92 x 4	41 x 8	51 x 9	22 x 3	24 x 2	84 x 2	63 x 3	53 x 1	92 x 2	53
91 x 7	72 x 2	23 x 3	61 x 7	62 x 3	53 x 2	75 x 1	81 x 7	60 x 9	83 x 1	80
82 x 4	62 x 4	90 x 9	84 x 2	73 x 3	33 x 3	83 x 2	91 x 8	31 x 7	22 x 4	108
88 x 1	81 x 5	54 x 2	57 x 0	78 x 1	41 x 7	96 x 0	72 x 3	65 x 0	52 x 4	130

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-11b

(2dx2d no reg.)

43 x22	13 x23	21 x26	32 x44	92 x23	44 x12	34 x12	21 x14	26
72 x41	61 x99	70 x43	58 x11	22 x33	33 x23	34 x12	19 x11	53
61 x76	81 x71	51 x66	71 x43	60 x39	29 x11	42 x31	61 x77	84
84 x12	92 x43	72 x34	22 x11	54 x22	82 x13	41 x14	30 x65	110

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-12

see-write (2dx1d, 2dx2d w/reg.)

43 x26	68 x 4	28 x75	36 x14	78 x 6	45 x 3	28 x18	83 x89	27
74 x36	19 x 9	94 x 4	57 x 7	87 x38	92 x 9	53 x72	68 x45	55
15 x 7	88 x 6	57 x 8	85 x92	46 x34	32 x 9	77 x 2	63 x73	82
24 x56	22 x89	55 x 5	96 x 8	67 x39	45 x 8	93 x 7	28 x38	110

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-12a

see-write

(2dx1d, w/reg.)

27	88	22	64	46	35	15	48	84	74	56	
x6	x9	x7	x9	x3	x9	x7	x5	x3	x4	x7	33
74	87	99	88	44	46	36	73	27	68	25	
x9	x3	x2	x2	x3	x5	x9	x6	x8	x4	x3	65
84	79	45	56	65	77	52	44	19	24	94	
x6	x7	x8	x6	x9	x4	x5	x3	x9	x8	x4	98
48	85	67	55	28	57	33	29	59	74	85	
x8	x7	x7	x4	x3	x2	x6	x7	x8	x9	x5	131
38	42	58	82	63	98	27	74	36	56	48	
x6	x9	x9	x5	x4	x8	x6	x4	x9	x6	x8	164

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-12b
(2dx2d w/reg.)

67	54	27	38	49	45	47	32	
x58	x32	x43	x24	x54	x16	x24	x25	28
67	83	67	67	82	98	29	28	
x63	x45	x35	x34	x73	x28	x46	x65	56
46	36	28	37	96	37	83	78	
x82	x35	x37	x33	x78	x28	x67	x26	84
58	58	54	85	33	47	64	97	
x23	x46	x78	x42	x57	x32	x54	x38	112

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-13
(2dx1d, 2dx2d, no reg. & reg.)

46 x 2	87 x46	52 x 7	91 x 6	63 x32	73 x 9	26 x33	51 x89	26
48 x57	71 x 8	34 x 5	93 x23	62 x 3	48 x 4	78 x66	46 x 6	53
96 x 2	42 x14	92 x 4	39 x 9	37 x95	82 x44	29 x95	67 x 5	80
58 x47	81 x 8	22 x34	53 x22	98 x 8	64 x37	56 x 9	51 x 8	106

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-14

see-write (3dx1d, 3dx2d, no reg.)

323	467	523	812	342	921	623	
x 3	x 11	x 3	x 24	x 2	x 4	x 21	28
423	401	632	512	811	722	310	
x 12	x 7	x 31	x 43	x 66	x 4	x 3	58
642	721	610	311	700	210	464	
x 2	x 34	x 6	x 5	x 9	x 98	x 22	89
801	133	322	501	111	410	931	
x 9	x 3	x 42	x 6	x 28	x 17	x 3	117

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-15

see-write

(3dx1d, 3dx2d, w/reg.)*

246 x 24	842 x 3	973 x 47	651 x 82	732 x 6	456 x 51	364 x 8	31
975 x 6	198 x 9	258 x 7	567 x 94	394 x 63	638 x 8	717 x 75	62
543 x 49	718 x 39	893 x 54	426 x 2	171 x 68	664 x 4	292 x 8	93
672 x 5	385 x 5	692 x 9	246 x 8	137 x 73	555 x 64	426 x 37	124

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

M-15a

see-write

(3d X 1d, w/reg.)*

396 x5	835 x7	447 x6	626 x9	685 x8	396 x3	696 x6	663 x5	(32)
357 x4	949 x4	559 x8	485 x7	999 x7	272 x8	459 x3	717 x6	(64)
358 x5	597 x9	748 x5	685 x3	788 x8	918 x7	268 x4	886 x3	(96)
826 x6	845 x7	378 x7	634 x9	584 x6	885 x8	339 x9	693 x3	(128)

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-15b
(3d X 2d, w/reg.)*

289 x32	523 x84	626 x56	485 x43	533 x44	156 x74	340 x13	(33)
935 x64	489 x26	778 x23	346 x39	223 x76	695 x47	473 x69	(68)
928 x67	895 x44	556 x46	687 x35	546 x52	834 x18	627 x75	(103)
337 x49	296 x32	896 x24	639 x48	982 x27	276 x20	549 x94	(136)

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-16
(3dx1d, 3dx2d, no reg. & reg.)*

916 x 3	777 x 23	871 x 11	641 x 2	332 x 8	413 x 31	526 x 47	31
767 x 42	912 x 42	511 x 69	212 x 4	800 x 8	756 x 9	381 x 7	61
503 x 3	653 x 6	641 x 12	819 x 5	601 x 7	722 x 34	893 x 34	89
713 x 22	947 x 75	498 x 35	539 x 6	482 x 96	223 x 3	721 x 4	120

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-17

(3dx3d, 4dx4d, w/reg.)

494 x325	368 x473	6803 x2571	295 x168	5997 x2431	1283 x2275	40
678 x346	3924 x7865	8142 x4352	752 x829	6937 x4395	506 x627	82
723 x889	5368 x2957	920 x716	483 x259	4753 x3741	3975 x3974	124

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

M-18
(Multi-digit nos. no reg. & reg.)

43 x 3	687 x 21	463 x 11	612 x 4	91 x23	86 x 5	24 x66	752 x829	32
463 x 97	4372 x2680	36 x19	24 x21	402 x 44	11 x 9	757 x 9	73 x 3	65
414 x 12	58 x11	4372 x3427	64 x27	728 x 5	75 x38	96 x 8	498 x 35	100
312 x 16	921 x 4	723 x789	246 x 9	803 x 2	23 x 3	358 x364	692 x 9	134

DIVISION

D-1	Division Facts, Products 0-45
D-2	Division Facts, Products 0-81*
D-2a	Division Facts, Products 0-81, Horizontal*
D-3	Add, Subtract, Multiply, & Divide Facts
D-4	2d ÷ 1d (w/rem.) (no reg. & reg.)
D-4a	2d ÷ 1d (w/rem.) (no reg.)
D-5	3d ÷ 1d (no rem. & rem.) (no reg. & reg.)
D-5a	3d ÷ 1d (no rem.) (no reg.)*
D-6	5d ÷ 1d (no rem. & rem.)*
D-7	Multi-digit ÷ 1d (no rem. & rem.)
D-8	2d ÷ 2d (no rem. & rem.)
D-9	3d ÷ 2d (no rem. & rem.)
D-10	4d ÷ 2d (no rem. & rem.)
D-11	Multi-digit ÷ 2d (no rem. & rem.)
D-12	3d ÷ multiples of 10 (no rem. & rem.)*
D-13	Multi-digit ÷ Multi-digit
D-14	Add, Subtract, Multiply, & Divide (Multi-digit nos.)

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-1

(Products 0-45)

5/50 7/21 1/1 4/36 5/10 3/9 4/4 4/28 2/10 9/18 11

2/8 1/7 4/24 1/8 5/35 6/36 7/28 8/24 1/5 7/35 21

2/18 6/42 9/45 1/0 6/18 4/20 8/32 5/5 6/30 5/40 31

3/3 1/2 3/21 9/27 4/32 3/15 2/2 5/15 2/12 3/6 41

4/16 8/40 6/24 7/42 3/24 4/8 3/12 9/36 5/45 6/12 51

3/27 1/9 7/14 5/25 8/16 2/4 3/18 9/9 4/12 2/16 61

1/3 2/6 5/20 7/7 9/27 4/36 3/21 6/24 8/32 2/14 71

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-2
(Products 0-81)*

4/36	2/10	8/16	9/81	7/42	7/0	5/35	3/15	8/82	7/63	10
6/24	5/45	3/3	8/48	2/6	7/56	4/12	9/18	7/21	6/54	20
1/7	6/42	8/56	9/36	3/18	5/5	7/49	4/28	9/72	3/24	30
5/25	6/12	7/56	8/24	3/9	4/20	2/0	1/9	8/72	9/54	40
2/4	9/63	7/35	5/15	8/64	6/18	4/24	9/54	4/0	8/32	50
6/6	2/12	7/28	9/72	6/48	4/32	9/81	8/64	3/21	7/63	60
6/54	3/27	5/30	8/48	6/36	6/54	8/32	7/56	4/16	7/14	70

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-2a

(Division 0-81)*
horizontal

28÷4 49÷7 5÷5 18÷3 36÷9 56÷8 42÷6 72÷9 9÷0 12÷2 10

3÷1 63÷9 45÷5 24÷6 32÷8 6÷6 54÷6 15÷3 81÷9 42÷7 20

0÷4 45÷9 14÷7 54÷9 27÷3 30÷6 48÷8 63÷9 18÷2 72÷8 30

21÷3 8÷8 36÷6 48÷6 4÷2 32÷4 72÷8 20÷4 56÷7 24÷8 40

36÷4 16÷8 12÷6 25÷5 63÷9 21÷7 27÷9 30÷5 20÷5 64÷8 50

35÷5 10÷2 8÷2 56÷7 0÷5 18÷9 48÷6 64÷8 28÷7 18÷6 60

16÷2 24÷4 40÷8 8÷4 54÷9 24÷3 35÷7 16÷4 6÷3 15÷5 70

81÷9 24÷8 72÷9 4÷4 40÷5 12÷4 20÷5 56÷8 0÷6 12÷3 80

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-3
(Add. Sub. Mult. & Div. Facts)

4	11	7		6		7	5		4	17	0	8		
+1	-5	x6	9/72	+3	5/30	x3	-4	3/27	x3	-8	x3	+9	1/6	18

16	7		15	9			6	4	13		8	18	7	
-9	+7	3/9	-6	x8	4/36	9/63	+9	x5	-7	7/28	+6	-9	x7	39

14	3		2	8	5		12	3	8	13		7	9	
-8	x6	7/42	+0	x6	+7	3/15	-6	x1	+5	-4	4/32	+8	x2	59

9		10		12	5	9	0	4		7	9	8		
+5	5/10	-6	7/56	-5	+4	x3	x5	+8	9/81	x6	x9	-5	6/42	78

3	6		9	6	15	8		5	17		7	3	7	
+2	x6	8/64	x4	x8	-8	+3	6/54	+6	-9	2/12	-3	-3	x3	98

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-4
(2d÷1d w/rem. no reg. & reg.)

4/85	9/57	2/43	5/97	3/31	5/48	3/29	4/81	5/97	24
2/73	4/59	7/30	6/70	3/95	8/67	4/59	4/33	6/45	46
9/78	4/97	5/37	2/77	9/97	8/49	6/65	3/86	5/82	70
7/82	9/88	3/37	2/93	7/46	7/76	6/89	3/70	7/90	95

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-4a

(2d÷1d w/rem., no reg.)

5/22	4/33	7/65	8/75	8/67	8/59	7/30	3/22	*16*
8/49	5/48	9/57	5/37	3/29	9/84	3/17	4/38	*32*
2/11	6/45	8/50	3/29	9/65	4/22	5/28	7/46	*48*
8/36	3/11	6/35	4/39	7/61	6/16	4/26	5/44	*64*
3/20	6/53	2/15	8/12	4/10	9/34	7/18	9/50	*80*

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

(3d÷1d, no rem. & rem.
no reg. & reg.)

$3/\overline{105}$	$2/\overline{262}$	$3/\overline{315}$	$4/\overline{104}$	$3/\overline{109}$	$2/\overline{217}$	$8/\overline{208}$	$5/\overline{328}$	22
$8/\overline{568}$	$7/\overline{721}$	$3/\overline{318}$	$7/\overline{205}$	$9/\overline{279}$	$4/\overline{416}$	$2/\overline{848}$	$6/\overline{204}$	42
$7/\overline{105}$	$4/\overline{298}$	$8/\overline{104}$	$6/\overline{606}$	$5/\overline{546}$	$6/\overline{402}$	$7/\overline{507}$	$6/\overline{102}$	63
$4/\overline{428}$	$7/\overline{497}$	$8/\overline{840}$	$9/\overline{701}$	$6/\overline{624}$	$3/\overline{219}$	$6/\overline{842}$	$9/\overline{950}$	100

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-5a

(3d÷1d, no rem.*
no reg.)

5/105	7/497	8/168	4/324	3/396	2/284	6/126	8/328	18
7/567	2/848	6/246	3/273	9/819	2/642	1/301	8/488	37
5/355	2/420	9/279	7/427	8/160	5/305	3/936	2/428	56
8/568	7/497	4/368	1/782	2/108	9/189	6/306	4/208	73
3/219	8/328	3/690	7/777	9/360	3/189	5/545	2/120	94

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-6

(5d÷1d , no rem. & rem.)*

$7/\overline{49504}$	$4/\overline{25900}$	$3/\overline{12764}$	$8/\overline{32592}$	$6/\overline{21088}$	22
$4/\overline{27598}$	$2/\overline{19101}$	$3/\overline{23904}$	$7/\overline{76853}$	$2/\overline{19243}$	46
$6/\overline{79548}$	$4/\overline{17359}$	$3/\overline{50742}$	$8/\overline{33214}$	$2/\overline{54732}$	71

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-7

(Multi Digit÷ 1D
no rem. & rem.)

4/30	9/369	2/109	5/90580	7/95	2/907	6/59902	5/51	27
8/60321	5/97	3/19014	4/484	7/322	6/51	3/20	8/10986	53
9/189	6/417	3/19949	6/98472	2/91	6/480	3/86011	9/97	81
3/28	2/39	3/68055	4/751	9/288	2/94	8/320	5/81483	107

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-8
(2d÷2d, no rem. & rem.)

23/$\overline{63}$	19/$\overline{41}$	42/$\overline{84}$	35/$\overline{81}$	16/$\overline{47}$	34/$\overline{68}$	21/$\overline{42}$	45/$\overline{95}$	13
13/$\overline{86}$	22/$\overline{66}$	37/$\overline{69}$	31/$\overline{62}$	83/$\overline{91}$	67/$\overline{76}$	22/$\overline{88}$	18/$\overline{52}$	27
32/$\overline{64}$	51/$\overline{88}$	20/$\overline{60}$	89/$\overline{99}$	44/$\overline{87}$	33/$\overline{99}$	23/$\overline{69}$	17/$\overline{83}$	40
24/$\overline{91}$	40/$\overline{40}$	28/$\overline{93}$	23/$\overline{46}$	79/$\overline{84}$	31/$\overline{93}$	45/$\overline{85}$	22/$\overline{89}$	54
44/$\overline{88}$	37/$\overline{86}$	21/$\overline{84}$	35/$\overline{75}$	42/$\overline{91}$	21/$\overline{63}$	13/$\overline{28}$	23/$\overline{64}$	67

D-9

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

(3d÷2d, no rem. & rem.)

34/374	63/504	25/125	11/128	14/298	46/322	15/334	14
23/276	33/367	51/867	19/361	42/966	53/598	37/148	29
31/497	15/225	24/216	41/674	32/475	36/180	64/789	41
83/927	57/171	26/714	65/714	54/682	65/520	12/228	57

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-10

(4d÷2d, no rem. & rem.)

$45/\overline{5130}$ $23/\overline{2438}$ $14/\overline{1237}$ $36/\overline{7848}$ $31/\overline{2742}$ $22/\overline{1933}$ 18

$27/\overline{6183}$ $35/\overline{3417}$ $42/\overline{4830}$ $18/\overline{4302}$ $71/\overline{6391}$ $72/\overline{9000}$ 36

$63/\overline{7245}$ $83/\overline{8881}$ $24/\overline{6936}$ $56/\overline{6712}$ $16/\overline{4256}$ $18/\overline{1918}$ 56

$43/\overline{4182}$ $25/\overline{2418}$ $61/\overline{6018}$ $19/\overline{6935}$ $33/\overline{3148}$ $67/\overline{6132}$ 74

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-11
(Multi-digit÷2d, no rem. & rem.)

25/127 34/374 45/5131 12/14 63/503 14/1237 22/110 11/128 19

67/71 43/129 16/32 19/61 14/126 22/1933 23/276 33/3690 35

51/102 19/361 36/784 31/2742 43/172 35/3417 25/241 23/270 53

17/51 51/867 42/4830 18/430 15/61 33/99 36/344 83/2490 69

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

(3d÷multiples of 10*
no rem. & rem.)

$10/\overline{112}$ $30/\overline{397}$ $90/\overline{720}$ $10/\overline{253}$ $80/\overline{320}$ $30/\overline{220}$ 13

$20/\overline{469}$ $50/\overline{250}$ $50/\overline{480}$ $60/\overline{120}$ $50/\overline{653}$ $40/\overline{170}$ 25

$40/\overline{380}$ $20/\overline{170}$ $30/\overline{180}$ $60/\overline{739}$ $60/\overline{967}$ $90/\overline{900}$ 38

$80/\overline{250}$ $20/\overline{527}$ $70/\overline{140}$ $80/\overline{897}$ $30/\overline{300}$ $20/\overline{117}$ 51

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-13
(Multi-digit÷Multi-digit)

3/69	5/710	25/63	9/418	7/94821	30/46	20/60	19
43/6880	32/3892	31/279	5/55250	80/320	51/102	8/91	37
4/94573	20/652	8/76	8/608	6/63244	71/284	22/66	58
2/46204	6/76	4/819	40/1050	2/109	70/850	9/85	81

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

D-14

Add., Sub., Mult., & Div.
(Multi-digit nos.)

534 - 21	74 +13	7/65	25 x6	238 + 63	7/49770	50 x20	21
7763 -2524	732 x 2	48 -25	943 +164	458 x 25	2/19101	67 -29	47
8606 +2642	6/417	33398 -12599	721 + 8	39/623	623 x 32	25/63	73
454 +223	254 x156	8606 +2654	60/1098	527 -416	51 + 8	30/180	95
753 x 6	62 -35	75 x21	25/755	28 +38	743 -365	750 x 10	117

DECIMALS

DC-1	10th, 100th, 1000th*
DC-2	Larger or Smaller
DC-3	Place Value - 10th, 100th
DC-4	Number Word to Decimal (10th)
DC-5	Number Word to Decimal (10th, 100th)
DC-6	Number Word to Decimal (10th, 100th, 1000th)
DC-7	Fraction to Equivalent Decimal
DC-8	Add Decimals
DC-9	Subtract Decimals*
DC-10	Decimal Point for Products*
DC-11	Decimal Point for Quotients
DC-12	Decimal Point for Sums, Differences, Products & Quotients

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

DC-1

Decimals
(10th, 100th, 1000th)

.8	.041	4.47	3.5	.02	.030	.125	.73	8
1.7	.83	7.02	.025	.33	4.2	.165	3.29	16
.09	.5	.857	.70	9.87	.602	.4	.77	24
.1	3.125	.7	.08	4.4	.003	6.9	8.72	32
.022	.758	.20	6.5	.10	1.007	.3	4.29	40
.009	.6	.001	2.4	.07	9.8	.403	.8	48
.60	9.045	.02	.660	.62	.9	6.18	9.02	56
.509	.5	.333	.2	4.30	.906	.94	1.101	64

DC-2

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

Decimals
(larger or smaller)

4.8 41.2	3.25 3.251	6.513 6.504	7.5 7.32	87.3 8.88	.5 .2	23.6 3.16	1.573 15.73	8
.80 8.0	16.455 16.45	1.42 1.423	.158 1.58	.1 1.1	85.142 85.136	6.15 6.1	0.5061 0.5131	16
.236 .225	5.612 5.621	3.27 3.25	4.161 4.61	6.42 63.5	.56 5.6	.2784 .3681	0.4004 0.4040	24
7.134 4.15	3.15 31.3	1.0401 1.0041	16.51 16.52	.7 .4	3.060 3.60	7.12 72.1	1.532 1.37	32
0.613 0.615	.9 .2	82.63 8.624	.0013 .003	1.567 16.57	27.43 27.34	9.56 9.656	4.701 4.719	40
4.25 42.5	5.0108 5.018	6.19 6.20	3.574 37.54	23.6 26.35	.0032 .032	3.572 3.725	4.951 4.59	48
0.19 0.12	64.3 6.34	7.82 7.83	.2 .6	.0040 .40	.873 .825	32.1 32.11	.10 .15	56
.10 .15	8.0 8.5	.850 .805	1.27 1.50	.3 .6	43.9 4.39	.25 .75	6.33 6.36	64

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

DC-3

Decimals-Place Value
(10th, 100th, 1000th)

WRITE A SIX (6) IN THE POSITION INDICATED

hundredths	.___ ___ ___	tenths	.___ ___ ___	hundredths	.___ ___ ___	5
tenths	.___ ___ ___	thousandths	.___ ___ ___	tenths	.___ ___ ___	10
thousandths	.___ ___ ___	hundredths	.___ ___ ___	hundredths	.___ ___ ___	17
thousandths	.___ ___ ___	tenths	.___ ___ ___	hundredths	.___ ___ ___	23
hundredths	.___ ___ ___	thousandths	.___ ___ ___	tenths	.___ ___ ___	29
tenths	.___ ___ ___	hundredths	.___ ___ ___	thousandths	.___ ___ ___	35
tenths	.___ ___ ___	thousandths	.___ ___ ___	tenths	.___ ___ ___	40
hundredths	.___ ___ ___	tenths	.___ ___ ___	thousandths	.___ ___ ___	46
thousandths	.___ ___ ___	hundredths	.___ ___ ___	thousandths	.___ ___ ___	54
hundredths	.___ ___ ___	tenths	.___ ___ ___	hundredths	.___ ___ ___	59
thousandths	.___ ___ ___	hundredths	.___ ___ ___	tenths	.___ ___ ___	65
thousandths	.___ ___ ___	thousandths	.___ ___ ___	tenths	.___ ___ ___	72

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

DC-4

Number Word to Decimal
(10th)

one tenth ______ seven tenths ______ nine tenths ______ 3

four tenths ______ two tenths ______ three tenths ______ 6

six tenths ______ eight tenths ______ five tenths ______ 9

one tenth ______ four tenths ______ nine tenths ______ 12

seven tenths ______ five tenths ______ eight tenths ______ 15

six tenths ______ one tenth ______ two tenths ______ 18

one tenth ______ three tenths ______ seven tenths ______ 21

two tenths ______ four tenths ______ nine tenths ______ 24

seven tenths ______ one tenth ______ six tenths ______ 27

three tenths ______ eight tenths ______ four tenths ______ 30

five tenths ______ nine tenths ______ two tenths ______ 33

eight tenths ______ four tenths ______ five tenths ______ 36

two tenths ______ seven tenths ______ three tenths ______ 39

DC- 5

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Number Word to Decimal
(10th, 100th)

nine hundredths _____
six hundredths _____
two tenths _____
four tenths _____
two hundredths _____
one tenth _____
nine hundredths _____
eight tenths _____
seven tenths _____
nine tenths _____
three hundredths _____
eight tenths _____
seven tenths _____
two tenths _____

seven tenths _____
eight hundredths _____
four hundredths _____
nine tenths _____
seven tenths _____
three tenths _____
six tenths _____
one tenth _____
three hundredths _____
two tenths _____
nine tenths _____
four tenths _____
nine hundredths _____
eight hundredths _____

three tenths _____ 4
five tenths _____ 9
seven hundredths _____ 14
four hundredths _____ 18
three hundredths _____ 23
six hundredths _____ 27
one hundredth _____ 32
two hundredths _____ 36
four tenths _____ 40
seven hundredths _____ 44
six hundredths _____ 49
one hundredth _____ 53
three tenths _____ 57
four hundredths _____ 62

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

DC- 6

Number Word to Decimal
(10th, 100th, 1,000)

four tenths	____	five hundredths	____	two tenths	____	4
five thousandths	____	eleven hundredths	____	four hundredths	____	11
six hundred five thousandths	____	nine tenths	____	fifteen thousandths	____	19
two hundredths	____	five hundred twenty thousandths	____	four tenths	____	25
eight tenths	____	seven thousandths	____	thirty seven hundredths	____	31
two hundred four thousandths	____	one hundredth	____	six tenths	____	38
forty six hundredths	____	one tenth	____	sixty thousandths	____	44
three hundredths	____	ninety nine hundredths	____	nine thousandths	____	51
seventy one hundredths	____	forty two thousandths	____	eight tenths	____	57
three tenths	____	fifty two hundredths	____	thirty six thousandths	____	63
nine hundred thirty thousandths	____	eighty five hundredths	____	eight thousandths	____	71
fifty thousandths	____	five tenths	____	six hundredths	____	77
one thousandth	____	sixty four hundredths	____	seven tenths	____	83

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

(Fraction-Equiv. Decima

$\frac{8}{100}=$	$\frac{18}{1000}=$	$\frac{2}{100}=$	$\frac{9}{10}=$	$\frac{1}{10}=$	$\frac{600}{100}=$	$\frac{5}{1000}=$	$\frac{85}{10}=$
$\frac{10}{100}=$	$\frac{23}{100}=$	$\frac{7}{1000}=$	$\frac{318}{1000}=$	$\frac{6}{10}=$	$\frac{25}{1000}=$	$\frac{5}{100}=$	$\frac{10}{10}=$
$\frac{2}{1000}=$	$\frac{73}{100}=$	$\frac{1}{10}=$	$\frac{1}{1000}=$	$\frac{15}{10}=$	$\frac{1000}{1000}=$	$\frac{33}{1000}=$	$\frac{42}{10}=$
$\frac{2561}{1000}=$	$\frac{56}{100}=$	$\frac{3333}{1000}=$	$\frac{2}{10}=$	$\frac{1}{100}=$	$\frac{429}{1000}=$	$\frac{20}{100}=$	$\frac{85}{10}=$
$\frac{3975}{1000}=$	$\frac{35}{10}=$	$\frac{525}{1000}=$	$\frac{715}{1000}=$	$\frac{3}{10}=$	$\frac{430}{100}=$	$\frac{165}{1000}=$	$\frac{60}{10}=$
$\frac{150}{100}=$	$\frac{40}{1000}=$	$\frac{5}{10}=$	$\frac{14}{100}=$	$\frac{7}{10}=$	$\frac{715}{1000}=$	$\frac{70}{1000}=$	$\frac{23}{10}=$
$\frac{7}{100}=$	$\frac{84}{1000}=$	$\frac{44}{100}=$	$\frac{8}{10}=$	$\frac{5841}{1000}=$	$\frac{243}{100}=$	$\frac{4}{10}=$	$\frac{25}{100}=$
$\frac{30}{10}=$	$\frac{235}{1000}=$	$\frac{300}{1000}=$	$\frac{3}{10}=$	$\frac{64}{100}=$	$\frac{5}{100}=$	$\frac{47}{1000}=$	$\frac{6}{1000}=$

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

DC- 8
(Decimals-Add)

.1	.76	2.48	3.47	.46	.3	8.59	.94	.86	.7	
+.2	+.81	+1.85	+1.03	+.53	+.8	+2.63	+.85	+.82	+.3	26
6.65	3.73	.8	.80	.76	.6	.4	2.48	.35	.9	
+2.02	+1.76	+.1	+.40	+.81	+.1	+.4	+1.86	+.62	+.6	46
.4	.59	.5	6.48	3.83	.62	.38	.3	.7	.6	
+.9	+.40	+.9	+1.24	+3.57	+.22	+.71	+.8	+.3	+.5	68
3.47	.47	.5	.81	.4	5.43	.75	.37	.1	2.36	
+1.24	+.52	+.8	+.38	+.5	+2.67	+.26	+.14	+.6	+1.86	90
.6	4.56	.2	.71	7.68	.4	2.26	.47	.5	.18	
+.8	+2.43	+.7	+.29	+3.52	+.7	+1.27	+.35	+.3	+.35	113

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

DC- 9
(Decimals-Subtract)

.9	.75	.68	.937	.9	.834	.47	.8	.3	.56	
-.2	-.23	-.26	-.256	-.5	-.258	-.22	-.2	-.1	-.13	18
.77	.6	.5	.725	.832	.82	.76	.7	.693	.4	
-.15	-.5	-.4	-.244	-.241	-.20	-.51	-.6	-.635	-.2	37
.482	.46	.8	.5	.781	.47	.423	.46	.9	.64	
-.256	-.11	-.4	-.2	-.625	-.13	-.315	-.12	-.3	-.11	57
.45	.8	.6	.722	.628	.76	.343	.45	.4	.53	
-.35	-.2	-.3	-.321	-.419	-.25	-.124	-.12	-.2	-.42	77
.5	.64	.57	.826	.6	.725	.68	.7	.4	.47	
-.2	-.28	-.34	-.246	-.3	-.312	-.33	-.3	-.1	-.24	94

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

DC-10

Decimals
(Multiply)*

Mark the decimal point in the correct place

2.6 x .3 78	1415 x .2 2830	53 x1.7 901	1.075 x 9.3 99975	7.31 x8.6 62866	6.3 x .5 315	.72 x.12 0864	2.4 x.13 312	1.8 x3.4 612	9
6.21 x 8.5 52785	.87 x 5 435	.004 x 39 0156	.217 x 16 3472	.62 x5.2 3224	1.8 x.02 0036	7.200 x .3 21600	2.3 x.10 230	8.70 x 1 870	18
16.3 x 2.9 4727	3.41 x1.01 34441	4.37 x.100 43700	9.6 x.15 1440	.58 x 3 174	16.5 x.031 05115	90 x.73 6570	.64 x.01 0064	4.11 x 72 29592	27
7.8 x100 7800	.74 x.31 2294	.375 x 1.8 06750	2.4 x .8 192	8.01 x8.01 641601	2.3 x.47 1081	23.01 x 1.56 358956	3.07 x .74 22718	1.68 x 3 504	36
1.83 x .04 0732	17 x.2 34	7.2 x.33 2376	9.1 x.35 3185	8.1 x .7 567	5.86 x 10 5860	6.45 x 2.3 14835	9.25 x1.83 169275	23 x.10 230	45

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

DC-11

Decimals
(Divide)

Mark the decimal point in the correct place

52 5/2.6	377 2.20/83	006 8/.048	4 7 3/14.1	3 21 9/28.9	1 179 5.1/60.13	50 .25/12.5	7
61 .4/2.44	210 .14/29.4	4 55 .2/9.1	167 5/.835	528 2.5/13.2	12 .023/.276	007 5/.035	14
727 .018/.0131	33 4/1.32	315. .026/8.19	7 16 .4/28.64	0 46 6/2.76	237 3/.711	11100 .27/2997	21
460 .123/56.58	9 .23/2.07	23 2/.46	15 .026/.39	081 7/.567	4 15 9/37.4	4 .007/.028	28
1700 .33/561	42 3.5/14.7	18 .41/7.38	6 2 6/37.2	16 .006/.0096	34 5.6/19.04	8 .07/.056	35
42 .186/7.812	309 .22/.6814	3 12 6/18.62	70 .042/2.94	481 .04/1.924	5 69 .12 /68.32	5103 .031/.15822	42

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

DC-12

Decimals
(Add., Sub., Mult., Div.)

Put the decimal point in the correct place

.004 x 39 0156	.7 +.2 9	114 15/17	.9 -.8 1	4.11 x 72 29592	.74 -.51 23	32 .67/2.144	7.85 -1.39 646	.32 +.59 91	9
2.3 x.10 230	315 .026/8.19	.089 -.012 077	.176 +.913 1089	4 7 3/14.1	.084 x 17 1428	.9 +.3 12	3.7 x 4 148	42.87 - 2.21 4066	18
50 .25/12.5	.87 -.38 49	.70 +.21 91	.23 x 6 138	.9 +.8 17	460 .123/56.58	1.8 x3.4 612	.632 +.004 636	65 4/2.6	27
1.83 x .04 187	.09 +.08 17	03 7/.21	37.2 -29.7 75	.74 x.31 2294	9.81 +8.40 1821	42 .186/7.812	7.5 -6.2 13	.49 -.87 136	36
3.91 -1.40	3.7 + .8 45	6.3 x .5	16 .006/.0096	.536 -.364 172	046 6/.276	.15 -.12 03	.375 x 1.8 0675	.98 -.15 83	45
.562 +.093 655	06 .43/.258	.9 -.4 5	9.6 x.15 144	.586 +.079 665	.90 +.80 170	61 1.1/6.71	3.18 +8.47 1165	.64 x.04 0256	54

WORD PROBLEMS

WP-1	Key Words (+, -)
WP-2	Key Words (+, -)
WP-3	Key Words (X, ÷)
WP-4	Key Words (+, -, X, ÷)
WP-4A	Key Words Answer Key
WP-5	Word Problems - Number Sentence (+, -)
WP-6	Word Problems - (+, -)
WP-7	Word Problems - Number Sentence (X, ÷)
WP-8	Word Problems - (X, ÷)
WP-9	Word Problems - (+, -, X, ÷)
WP-10	Word Problems - Number Sentence (2 digit +, -)*
WP-11	Word Problems - (2 digit +, -)*
WP-12	Word Problems - Number Sentence (3 digit +, -)*
WP-13	Word Problems - (3 digit +, -)*
WP-14	Word Problems - Number Sentence (3d X, ÷)
WP-15	Word Problems - (3d X, ÷)
WP-16	Word Problems (2, 3 digit +, -, X, ÷)
WP-17	Money Problems - to 50 (+, -)*

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

WP 1

Key Words (+, -)

Write the correct symbol for the key words.

ADD	ATE	ARE	PLUS	AWAY	LOST	FROM	FOUND	GAVE	MORE	10
SOLD	LEFT	GOT	GONE	AND	STOLE	SOLD	AWAY	STOLE	ATE	20
GOT	LEFT	MORE	GONE	AND	PLUS	FOUND	ARE	FROM	ADD	30
GAVE	LOST	FOUND	ARE	GONE	STOLE	PLUS	GAVE	GOT	AWAY	40
SOLD	MORE	ATE	LEFT	FROM	LOST	AND	ADD	GONE	AND	50
GAVE	LOST	ARE	FOUND	ADD	PLUS	STOLE	ATE	FROM	GOT	60
MORE	AWAY	LEFT	SOLD	PLUS	FOUND	GAVE	ARE	ATE	LOST	70
PLUS	MORE	LEFT	AWAY	STOLE	AND	ADD	GONE	FROM	ADD	80
LEFT	GONE	GAVE	FROM	PLUS	ARE	STOLE	SOLD	ATE	GOT	90
FOUND	AND	AWAY	MORE	LOST	FOUND	ARE	LEFT	GONE	STOLE	100

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

WP-2
Key Words (+, -)

Write the correct symbol for the key word.

MANY MORE	MORE THAN	ALTOGETHER	EARNED	COST TOGETHER	HAVE LEFT	EMPTY	CHANGE RECEIVED	IN ALL	TOTAL	10
BOUGHT	GREATER THAN	FEWER THAN	DIFFERENCE	LESS THAN	BOUGHT	DIFFERENCE	TOTAL	CHANGE RECEIVED	LESS THAN	20
FEWER THAN	GREATER THAN	COST TOGETHER	EARNED	HAVE LEFT	MANY MORE	EMPTY	MORE THAN	ALTOGETHER	BOUGHT	30
IN ALL	EARNED	TOTAL	LESS THAN	HAVE LEFT	IN ALL	ALTOGETHER	FEWER THAN	DIFFERENCE	MANY MORE	40
MORE THAN	COST TOGETHER	CHANGE RECEIVED	GREATER THAN	EMPTY	IN ALL	ALTOGETHER	LESS THAN	COST TOGETHER	EARNED	50
HAVE LEFT	FEWER THAN	GREATER THAN	CHANGE RECEIVED	EMPTY	DIFFERENCE	TOTAL	MORE THAN	BOUGHT	MANY MORE	60
MANY MORE	MORE THAN	LESS THAN	GREATER THAN	EARNED	MANY MORE	EMPTY	TOTAL	HAVE LEFT	COST TOGETHER	70
BOUGHT	FEWER THAN	IN ALL	ALTOGETHER	CHANGE RECEIVED	DIFFERENCE	HAVE LEFT	TOTAL	MANY MORE	DIFFERENCE	80
ALTOGETHER	EARNED	BOUGHT	FEWER THAN	COST TOGETHER	LESS THAN	GREATER THAN	CHANGE RECEIVED	EMPTY	IN ALL	90
MORE THAN	MANY MORE	HAVE LEFT	EMPTY	EARNED	IN ALL	COST TOGETHER	LESS THAN	HAVE LEFT	BOUGHT	100

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

WP-3
Key Words (X, ÷)

Write the correct symbol for the key words.

PRODUCT	HALF OF	ALTOGETHER	EQUAL GROUPS	PER	EACH	IN ALL	SEPARATE INTO	TIMES	TWICE AS	11
PUT INTO GROUPS	ALTOGETHER	SEPARATE INTO	PRODUCT	ALTOGETHER	IN ALL	HALF OF	PRODUCT	TWICE AS	IN ALL	21
EACH	TIMES	PER	EQUAL GROUPS	SEPARATE INTO	PUT INTO GROUPS	IN ALL	ALTOGETHER	SEPARATE INTO	TWICE AS	32
TIMES	EQUAL GROUPS	PRODUCT	PER	HALF OF	EACH	PRODUCT	EACH	EQUAL GROUPS	IN ALL	44
PER	HALF OF	TIMES	PUT INTO GROUPS	TWICE AS	SEPARATE INTO	ALTOGETHER	IN ALL	SEPARATE INTO	EACH	55
TIMES	ALTOGETHER	EQUAL GROUPS	PER	PUT INTO GROUPS	TWICE AS	PRODUCT	HALF OF	PER	IN ALL	65
HALF OF	TWICE AS	PRODUCT	EACH	HALF OF	EQUAL GROUPS	ALTOGETHER	PUT INTO GROUPS	TIMES	SEPARATE INTO	76
PER	PRODUCT	TWICE AS	HALF OF	PUT INTO GROUPS	TIMES	EACH	IN ALL	SEPARATE INTO	EQUAL GROUPS	87
ALTOGETHER	EQUAL GROUPS	IN ALL	ALTOGETHER	PER	TIMES	TWICE AS	HALF OF	SEPARATE INTO	EACH	98
PUT INTO GROUPS	TWICE AS	HALF OF	EACH	HALF OF	TIMES	PRODUCT	IN ALL	ALTOGETHER	SEPARATE INTO	109

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

Key Words (+, -, ×, ÷)

Write the correct symbol for the key words.

IN ALL	FROM	SEPARATE INTO	GOT	HALF	HAVE LEFT	PLUS	TWICE AS	PUT INTO GROUPS	AWAY	11
PRODUCT	FEWER THAN	PER	EACH	TIMES	GREATER THAN	MORE	EARNED	TOTAL	AND	22
EQUAL GROUPS	CHANGE RECEIVED	LESS THAN	DIFFERENCE	ALTOGETHER	GOT	HAVE LEFT	AWAY	SEPARATE INTO	GREATER THAN	32
EARNED	DIFFERENCE	TOTAL	PER	PUT INTO GROUPS	AND	TIMES	TWICE AS	ALTOGETHER	LESS THAN	42
FROM	EQUAL GROUPS	PRODUCT	IN ALL	HALF	MORE	FEWER THAN	PLUS	EACH	CHANGE RECEIVED	54
EARNED	GOT	TWICE AS	ALTOGETHER	PUT INTO GROUPS	EQUAL GROUPS	IN ALL	SEPARATE INTO	LESS THAN	PER	65
TIMES	DIFFERENCE	FROM	PLUS	TOTAL	HAVE LEFT	CHANGE RECEIVED	AND	FEWER THAN	MORE	75
HALF	GREATER THAN	PRODUCT	AWAY	EACH	FEWER THAN	AWAY	DIFFERENCE	FROM	CHANGE RECEIVED	86
AND	TIMES	PUT INTO GROUPS	GOT	HAVE LEFT	ALTOGETHER	HALF	LESS THAN	EQUAL GROUPS	GREATER THAN	96
TWICE AS	PLUS	TOTAL	SEPARATE INTO	MORE	LESS THAN	EACH	EARNED	FROM	TWICE AS	107

WP-4A

ORANGE COUNTY PUBLIC SCHOOLS
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Key Words
Answer Key

WP-1

gave -
from -
stole -
gone -
sold -
lost -
away -
ate -
and +
more +
plus +
got +
found +
are +
add +

WP-2

have left -
less than -
change received -
greater than -
difference -
more than -
fewer than -
many more -
empty -
total +
in all +
cost together +
altogether +
bought +
earned +

WP-3

times X
twice as X
product X
altogether X
in all X
each X ÷
half of ÷
put into groups ÷
equal groups ÷
separate into ÷
per ÷

WP-4

+	-	X
more	less than	times
plus	difference	twice as
got	from	product
total	have left	altogether
altogether	away	in all(+ x)
in all	greater than	each(x ÷)
earned	fewer than	
and	change received	

÷

half of
put into groups
equal groups
separate into
per

ORANGE COUNTY PUBLIC SCHOOLS
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see-mark

WP-5

Word Problems
Number Sentence (+, -)

Mark the correct number sentence for each problem.

1. Jim got 9 books. His sister borrowed 3 of them. How many did Jim have left?

___9 - 3 ___9 + 3 ___9 x 3

2. Tim found 5 shells. His sister found 3 shells. Together how many shells did they find?

___5 ÷ 3 ___5 + 3 ___5 - 2

3. Mary had 4 balls. She found 2 more. How many balls did she have in all?

___4 + 2 ___4 ÷ 2 ___4 x 2

4. 8 blue birds were sitting on the fence. 2 black birds came. How many fewer black birds are there than blue birds?

___8 ÷ 2 ___8 - 2 ___8 + 2

5. 11 girls and 8 boys were at Bob's party. How many children attended the party together?

___11 - 8 ___11 x 8 ___11 + 8

6. 5 blue cars are in the parking lot. 2 cars drove away. How many cars are left.

___5 - 2 ___5 + 2 ___5 x 2

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

WP-6
Word Problems (+, -)

1. Mary had 4 balls. She found 2 more. How many balls did she have in all?

2. Jim got 9 books. His sister borrowed 3 of them. How many did Jim have left?

3. 8 blue birds were sitting on the fence. 2 black birds came. How many fewer black birds are there than blue birds?

4. Tim found 5 shells. His sister found 3 shells. Together how many shells did they find?

5. 5 blue cars are in the parking lot. 2 cars drove away. How many cars are left?

6. 11 girls and 8 boys were at Bob's party. How many children attended the party altogether?

WP-7

ORANGE COUNTY PUBLIC SCHOOLS
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see-mark

Word Problems
Number Sentence (X ÷)

Mark the correct number sentence for each problem.

1. There are 3 small buses with 9 seats on each bus. How many seats in all?

___9 x 3 ___9 + 3 ___9 - 3

2. There are 18 students in Sue's class. If the teacher divides the class into three equal groups, how many students will be in each group?

___18 - 3 ___18 ÷ 3 ___18 x 3

3. John has 6 rows of dimes with 7 dimes in each row. How many dimes does John have together?

___6 - 7 ___6 x 7 ___6 + 7

4. 16 pieces of chalk were divided equally among 4 children. How many pieces of chalk did each child receive?

___16 + 4 ___16 ÷ 4 ___16 x 4

5. Mrs. Jones picked 72 flowers. If she puts 9 flowers into each vase, how many vases does she need?

___72 ÷ 9 ___72 x 9 ___72 + 9

6. Ray set up 8 rows of chairs. There are 7 chairs in each row. What is the number of chairs that Ray set up in all?

___8 + 7 ___8 ÷ 7 ___8 x 7

WP-8

see-write

Word Problems (X, ÷)

1. John has 6 rows of dimes with 7 dimes in each row. How many dimes does John have together?

2. 16 pieces of chalk were divided equally among 4 children. How many pieces of chalk did each child receive?

3. There are 3 small buses with 9 seats on each bus. How many seats in all?

4. There are 18 students in Sue's class. If the teacher divides the class into three equal groups, how many students will be in each group?

5. Ray set up 8 rows of chairs. There are 7 chairs in each row. What is the number of chairs that Ray set up in all?

6. Mrs. Jones picked 72 flowers. If she puts 9 flowers into each vase, how many vases does she need?

WP-9

see-write

Word Problems (+, -, x, ÷)

1. Betty had 14 sheep. She lost 6 of them. How many more does she need to find?

2. Jane needs to make 7 blouses. She needs 4 feet of fabric to make 1 blouse. How many feet of fabric will she need all together?

3. Sam found 6 shells. His brother found 7 shells. How many total shells did they find?

4. Mr. Smith had 54 apples to put in boxes. He can put 9 apples in each box. How many boxes will he need?

5. Sam had 8 pennies. He found 4 more. How many pennies does he have now?

6. The bicycle factory made 45 bicycles. The same number of bikes were sent to 9 stores. How many bikes did each store receive?

7. 4 groups of children went to the zoo. There were 5 children in each group. How many children went on the field trip?

8. Patty had 10 peanuts. She gave her friend 4 of them. How many does she have to eat?

ORANGE COUNTY PUBLIC SCHOOLS
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see-mark

Word Problems
Number Sentence (2 digit +, -)*

Mark the correct number sentence for each problem.

1. There were 64 boys and 23 girls absent from Elm School on Monday. How many students were absent in all?

___64 + 23   ___64 x 23   ___64 - 23

2. Fred picked 72 oranges from one tree and 54 from another tree. How many oranges did he pick in all?

___72 ÷ 54   ___72 + 54   ___ 72 x 54

3. Sam has earned 25 points. He needs 57 points to win a prize. How many more points does he need to win the prize?

___57 x 25   ___57 + 25   ___57 - 25

4. Mrs. Jones drove 37 miles in January and 51 miles in February. How many miles did she drive in the 2 months?

___51 - 37   ___51 + 37   ___ 51 x 37

5. A florist had 74 plants. He sold 33 of them. How many plants did he have left?

___74 - 33   ___74 + 33   ___ 74 ÷ 33

6. Jim weighs 89 pounds. Tom weighs 75 pounds. How much more does Jim weigh than Tom?

___89 + 75   ___89 ÷ 75   ___89 - 75

see-write

Word Problems (2d +, -)*

1. Mrs. Jones drove 37 miles in January and 51 miles in February. How many miles did she drive in the 2 months?

2. Sam has earned 25 points. He needs 57 points to win a prize. How many more points does he need to win the prize?

3. A florist had 74 plants. He sold 33 of them. How many plants did he have left?

4. Fred Picked 72 oranges from one tree and 54 from another tree. How many oranges did he pick in all?

5. Jim weighs 89 pounds. Tom weighs 75 pounds. How much more does Jim weigh than Tom?

6. There were 64 boys and 23 girls absent from Elm School on Monday. How many students were absent in all?

ORANGE COUNTY PUBLIC SCHOOLS
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see-mark

Word Problems-Number Sentence (3 digit +, -)*

Mark the correct number sentence for each problem.

1. The Smiths drove 115 miles on Tuesday, 163 miles on Wednesday and 101 miles on Thursday. How many miles did they drive in all?

$$\begin{array}{r}115\\163\\+101\\\hline\end{array}\qquad\begin{array}{r}115\\163\\-101\\\hline\end{array}\qquad\begin{array}{r}115\\163\\\times 101\\\hline\end{array}$$

2. A farmer had 125 chickens, 105 pigs and 115 cows. How many animals does he have altogether?

$$\begin{array}{r}125\\105\\-115\\\hline\end{array}\qquad\begin{array}{r}125\\105\\\div\ 115\\\hline\end{array}\qquad\begin{array}{r}125\\105\\+115\\\hline\end{array}$$

3. There are 927 students at Lincoln School. If 475 students are boys, how many girls go to Lincoln School?

$$\begin{array}{r}927\\\times 475\\\hline\end{array}\qquad\begin{array}{r}927\\+475\\\hline\end{array}\qquad\begin{array}{r}927\\-475\\\hline\end{array}$$

4. On Monday, 863 cars went through the toll booth. On Tuesday, 672 cars went through the booth. How many more cars went through the booth on Monday than Tuesday?

$$\begin{array}{r}\div\ 863\\672\\\hline\end{array}\qquad\begin{array}{r}863\\-672\\\hline\end{array}\qquad\begin{array}{r}863\\+672\\\hline\end{array}$$

5. There were 261 fish in Golden Pond. Fishermen caught 26 fish. How many fish were left in the pond.

$$\begin{array}{r}261\\\times\ 26\\\hline\end{array}\qquad\begin{array}{r}261\\+\ 26\\\hline\end{array}\qquad\begin{array}{r}261\\-\ 26\\\hline\end{array}$$

6. Joe has 231 stamps in the book. He put 100 more in on Monday and 151 in on Tuesday. What is the total number of stamps in Joe's book?

$$\begin{array}{r}231\\100\\\times 151\\\hline\end{array}\qquad\begin{array}{r}231\\100\\\div\ 151\\\hline\end{array}\qquad\begin{array}{r}231\\100\\+151\\\hline\end{array}$$

WP-13

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Word Problems (3 digit +, -)*

1. On Monday, 863 cars went through the toll booth. On Tuesday, 672 cars went through the booth. How many more cars went through the booth on Monday than Tuesday?

2. A farmer had 125 chickens, 105 pigs and 115 cows. How many animals does he have altogether?

3. There were 261 fish in Golden Pond. Fishermen caught 26 fish. How many fish were left in the pond?

4. Joe has 231 stamps in the book. He put 100 more in on Monday and 151 in on Tuesday. What is the total number of stamps in Joe's book?

5. The Smiths drove 115 miles on Tuesday, 163 miles on Wednesday and 101 miles on Thursday. How many miles did they drive in all?

6. There are 927 students at Lincoln School. If 475 students are boys, how many girls go to Lincoln School?

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

Word Problems-Number
Sentence (3d X, ÷)*

Mark the correct number sentence for each problem.

1. Sam has 5 jars of peanuts. Each jar has 125 peanuts. How many peanuts are there altogether?

___ 5 + 125 ___5 - 125 ___5 X 125

2. Betty has 3 lists of spelling words. Each list has 110 words. How many spelling words does Betty have in all?

___3 ÷ 110 ___3 X 110 ___3 + 110

3. There were 171 bananas at the fruit stand in bunches. Each bunch of bananas had 9 bananas. How many bunches of bananas were there?

___171 - 9 ___171 X 9 ___171 ÷ 9

4. An airplane traveled 574 miles in 7 hours. How many miles did the airplane travel per hour?

___574 ÷ 7 ___ 574 + 7 ___574 X 7

5. Sue filled 6 pages of a book with stamps. She put 100 stamps on each page. How many stamps were put in the book?

___6 + 100 ___6 ÷ 100 ___6 X 100

6. Bill has 4 boxes of pencils. There are 165 pencils in each box. How many pencils are there in all?

___165 ÷ 4 ___165 + 4 ___165 X 4

WP-15

see-write Word Problems (3d X ÷)*

1. Sue filled 6 pages of a book with stamps. She put 100 stamps on each page. How many stamps were put in the book?

2. There were 171 bananas at the fruit stand in bunches. Each bunch of bananas had 9 bananas. How many bunches of bananas were there?

3. Betty has 3 lists of spelling words. Each list has 110 words. How many spelling words does Betty have in all?

4. An airplane traveled 574 miles in 7 hours. How many miles did the airplane travel per hour?

5. Bill has 4 boxes of pencils. There are 165 pencils in each box. How many pencils are there in all?

6. Sam has 5 jars of peanuts. Each jar has 125 peanuts. How many peanuts are there altogether?

ORANGE COUNTY PUBLIC SCHOOLS
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WP-16

(Word Problems (2d, 3d +, -, X, ÷)*

1. A large room contained 6 rows with the same number of seats in each row. If there were 258 seats in the room how many are in each row?

2. Betty picked 49 flowers. She took 28 of them to neighbors and left the rest at home. How many flowers did she leave at home?

3. There are 92 first graders, 86 second graders and 74 third graders at Valley School. How many total children are there in the first three grades?

4. If there were 4 cartons and each one weighed 125 pounds. How many pounds do the cartons weigh altogether?

5. George is reading a science book that has a total of 253 pages. He had already read 124 pages. How many pages does he have left to read?

6. An office building had 3 drink machines for its workers. If each machine holds 132 drinks then how many drinks are there in all?

7. Martha weighed 94 pounds one year ago. Since that time she has gained 12 pounds. How much more does she weigh now?

8. Bobby had 144 football cards. He put 8 cards on each page of his album. How many pages did he use?

WP-17

see-write

Money Problems-to 50 cents*

1. Kate has 28 cents. She spent 6 cents. How much does she have left?

2. Jack spent 30 cents for candy and 15 cents for gum. How much did he spend in all?

3. Sal bought a pen for 55 cents and a tablet for 25 cents. How much more did the pen cost than the tablet?

4. One candy bar costs 15 cents. The other one cost 34 cents. How much do the candy bars cost in all?

5. Sue wants a pen for 45 cents. She has 20 cents saved. How much more does she need to buy the pen?

6. Jim has 13 cents in his bank. His brother gave him 16 cents. How much money does he have altogether?

FRACTIONS

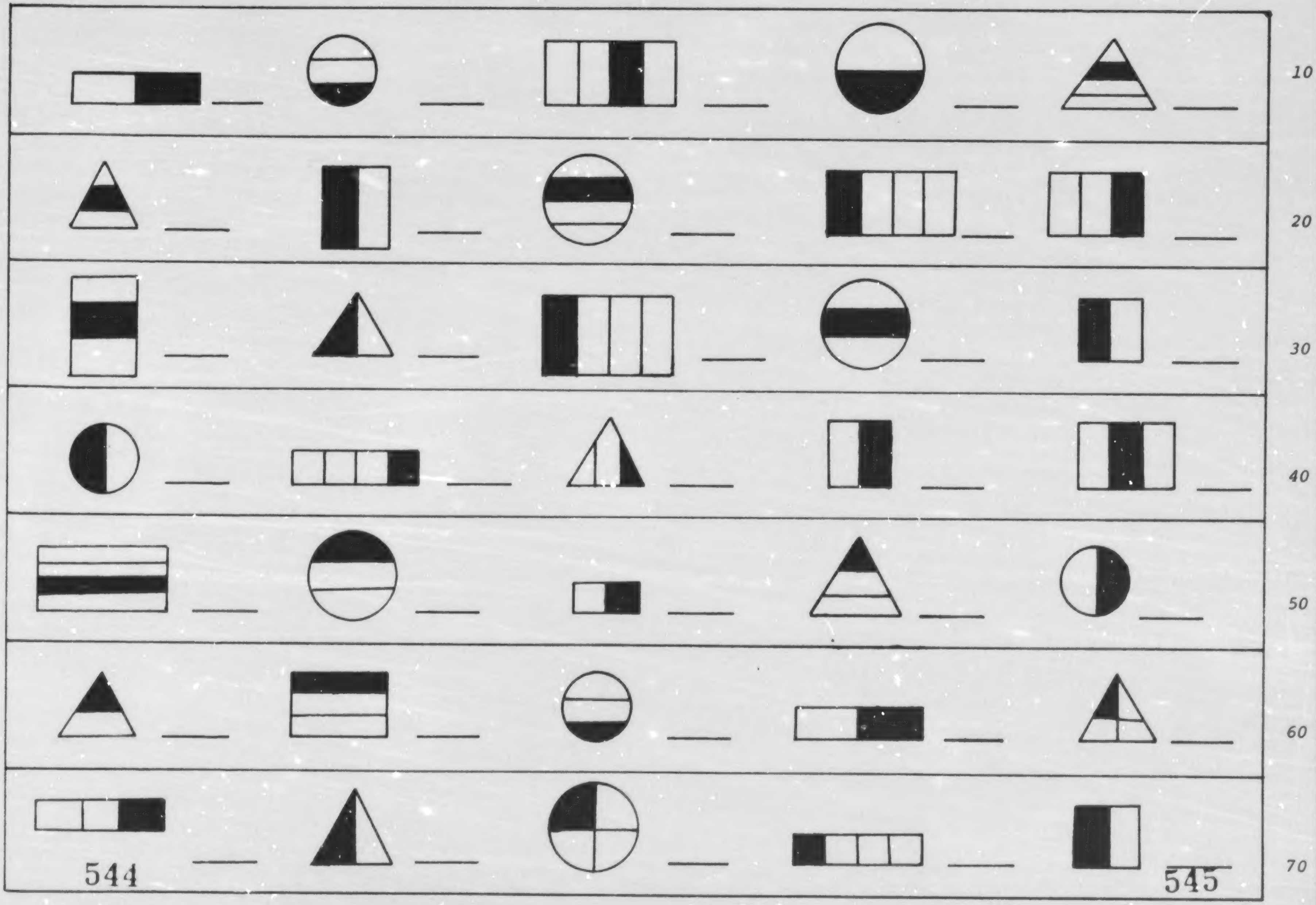
F-1	Picture - Write Fractions (1/2, 1/3, 1/4)*
F-2	Picture - Write Fractions (1/2, 1/4, 1/5, 1/8, 1/10)
F-3	Fractions - Equivalent Objects (1/2, 1/3, 1/4)*
F-4	Picture - Equivalent Fractions (1/2, 1/4, 1/3)
F-5	Mixed Numbers to Improper Fractions
F-6	Improper Fractions to Mixed Numbers
F-7	Fraction to Lowest Terms
F-8	Equivalent Fractions
F-9	Addition - Like Denominators*
F-10	Addition - Unlike Denominators
F-11	Addition - Mixed Numbers (No renaming)
F-12	Addition - Mixed Numbers (Renaming)
F-13	Addition - Mixed Numbers (No renaming & renaming)
F-14	Subtraction - Like Denominators*
F-15	Subtraction - Unlike Denominators
F-16	Subtraction - Mixed Numbers (No renaming)
F-17	Subtraction - Mixed Numbers (renaming)
F-18	Subtraction - Mixed Numbers (No renaming & renaming)
F-19	Addition & Subtraction, Mixed Numbers (No renaming & renaming)
F-20	Multiplication - Proper Fractions
F-21	Multiplication -Proper Fractions X Whole Numbers

F-22	Multiplication - Proper Fractions X Mixed Numbers
F-23	Division - Proper Fractions
F-24	Division - Proper Fractions ÷ Whole Numbers
F-25	Division - Proper Fractions ÷ Mixed Numbers
F-26	Multiplication & Division - Mixed Numbers

F-1

see-write

1/2, 1/3, 1/4*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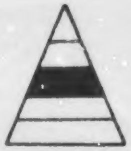
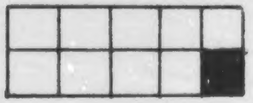
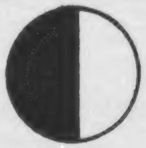
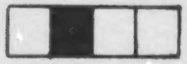
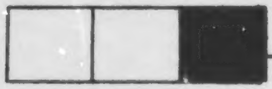
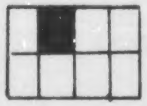
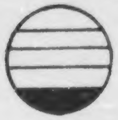
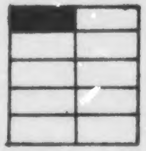
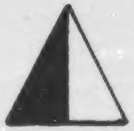
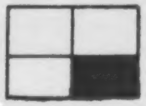
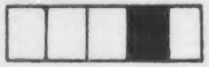
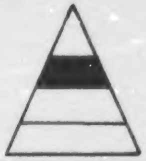
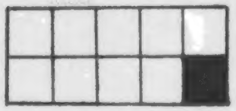
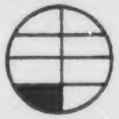
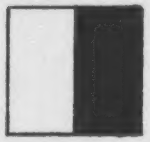
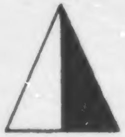
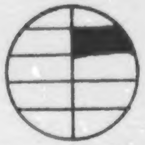
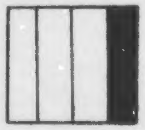
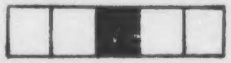
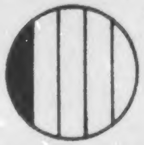
see-write

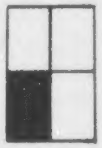
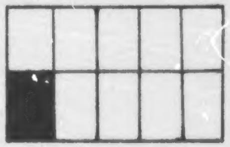
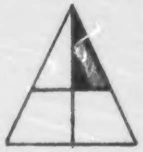
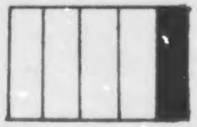
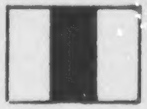
1/2, 1/4, 1/5, 1/8, 1/10

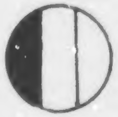
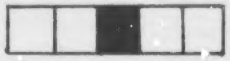
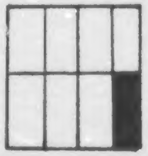
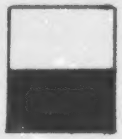
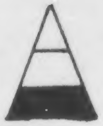
 ___  ___  ___  ___  ___ 11

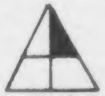
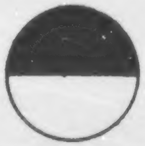
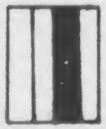
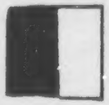
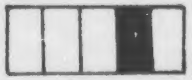
 ___  ___  ___  ___  ___ 22

 ___  ___  ___  ___  ___ 33

 ___  ___  ___  ___  ___ 44

 ___  ___  ___  ___  ___ 55

 ___  ___  ___  ___  ___ 66

 ___  ___  ___  ___  ___ 76

see-mark

Equiv. Objects
(1/2, 1/3, 1/4) *

Circle the equivalent objects beside each fraction

1/4 ■ ■ ■ ■	1/2 ■ ■	1/4 ■ ■ ■ ■ ■ ■ ■ ■	1/3 ■ ■ ■ ■ ■ ■	1/2 ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
1/2 ■ ■ ■ ■ ■ ■ ■ ■	1/4 ■ ■ ■ ■	1/3 ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	1/4 ■ ■ ■ ■ ■ ■ ■ ■	1/3 ■ ■ ■ ■ ■ ■ ■ ■ ■
1/3 ■ ■ ■ ■ ■ ■	1/2 ■ ■	1/4 ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	1/3 ■ ■ ■ ■ ■ ■ ■ ■ ■	1/2 ■ ■ ■ ■ ■ ■
1/3 ■ ■ ■	1/2 ■ ■	1/2 ■ ■ ■ ■ ■ ■	1/4 ■ ■ ■ ■	1/4 ■ ■ ■ ■

1/4
■ ■ ■
■ ■ ■
	1/3
	■ ■ ■
		1/4
		■ ■ ■ ■
		■ ■ ■ ■
		■ ■ ■ ■
			1/2
			■ ■ ■
			■ ■ ■
				1/3
				    ■
				  ■
				■

1/4 ■ ■ ■ ■	1/3 ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	1/2 ■ ■ ■ ■ ■ ■ ■ ■	1/3 ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	1/4 ■ ■ ■ ■ ■ ■ ■ ■

1/2
■ ■
	1/2
	■ ■
	■ ■
	■ ■
		1/4
		  ■
		■
		  ■
		■
			1/2
			■ ■ ■ ■ ■
			■ ■ ■ ■ ■
				1/3
				■ ■ ■

ORANGE COUNTY PUBLIC SCHOOLS
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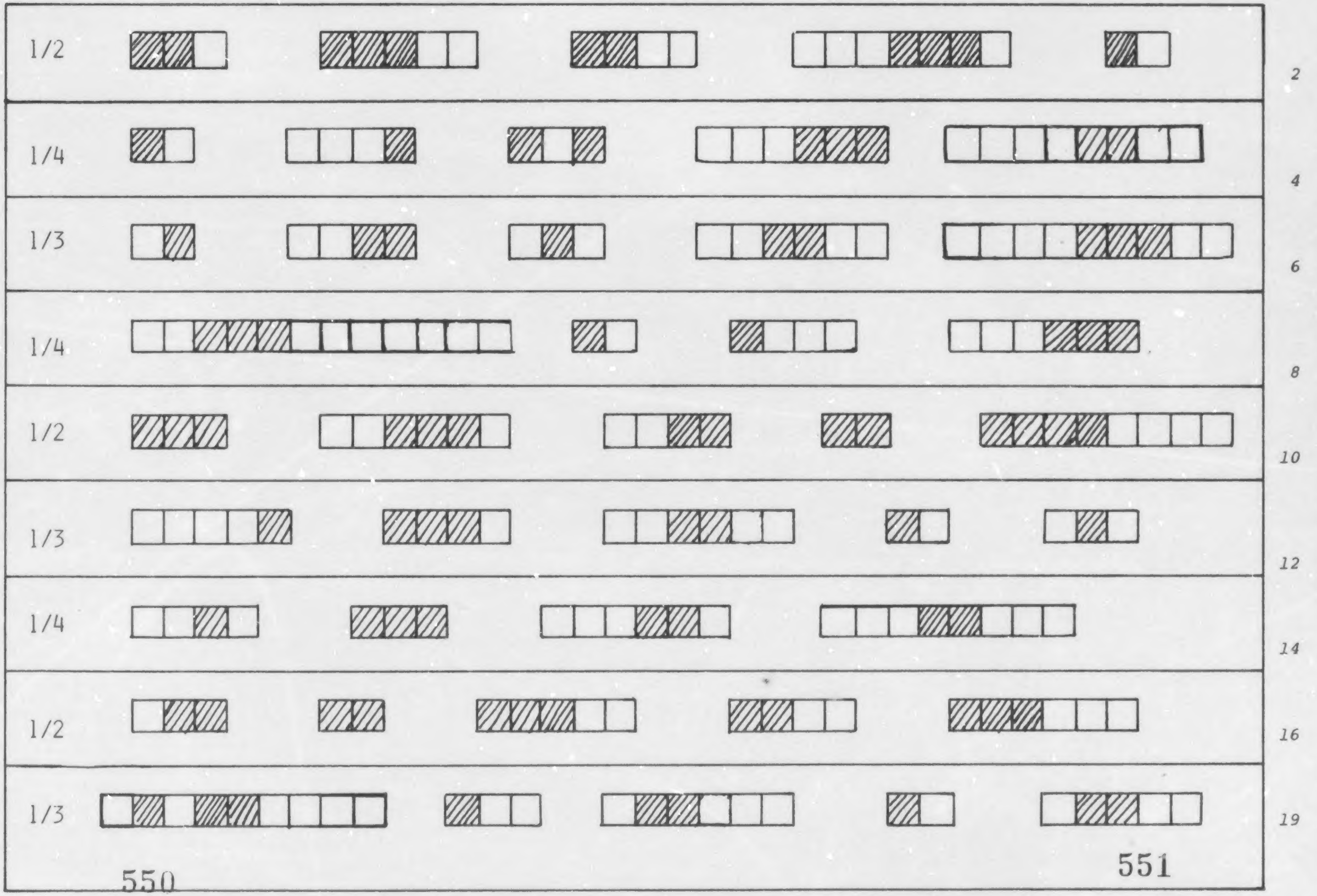
see-mark

F-4

Equiv. Fractions
(1/2, 1/3, 1/4)

Mark the equiv. fractions beside each fraction


1/2
2
1/4
4
1/3
6
1/4
8
1/2
10
1/3
12
1/4
14
1/2
16
1/3
19

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

Mixed no. to improper fraction

F-5

9 1/2	4 5/8	5 1/3	2 2/2	1 5/7	3 1/4	3 8/9	5 4/7	2 3/10	27
1 5/9	5 1/5	6 5/8	4 3/4	7 1/5	2 9/10	8 1/3	2 1/6	5 3/4	55
2 3/8	7 2/3	1 3/4	3 3/5	9 1/2	4 1/4	1 2/13	6 1/6	2 1/14	83
4 1/3	2 2/3	3 3/4	5 1/6	8 1/4	1 1/2	7 1/3	2 2/11	3 1/3	109
5 1/4	6 9/12	1 3/19	3 1/5	1 7/8	6 1/2	2 3/5	4 2/5	8 3/5	138

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

Improper Fraction to mixed no.

F-6

257/6	13/2	38/7	19/8	151/4	176/7	61/6	8/3	191/9	32
25/4	47/8	7/6	56/9	11/2	53/2	304/9	29/3	39/8	61
13/2	15/8	24/11	16/3	71/6	26/5	33/9	43/7	12/7	90
27/5	17/3	19/6	7/2	29/4	19/8	22/3	35/9	10/3	117
37/4	13/4	28/6	37/8	14/3	35/6	54/7	27/5	21/4	144

OC
PS

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see-write

Reduce to lowest terms

F-7

2/4	8/18	9/15	6/16	2/8	9/12	8/14	4/20	6/10	18
10/16	6/12	2/14	4/6	12/18	9/15	3/6	6/18	16/20	36
4/16	12/15	4/18	5/20	9/18	3/15	8/10	2/12	14/20	55
6/20	3/18	5/15	4/10	8/24	4/12	6/14	7/28	4/14	74
3/12	6/8	8/12	14/18	2/20	10/14	3/12	10/15	12/20	94

F-8

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

Equivalent Fractions

4/5 = /20   1/2 = /10   3/10 = /100   3/5 = /10   2/3 = /15   1/3 = /18   1/4 = /16   9

3/4 = /100   1/4 = /24   10/10 = /100   2/5 = /20   7/4 = /12   1/3 = /15   3/8 = /16   20

3/8 = /24   7/12 = /24   2/3 = /6   9/50 = /100   4/25 = /100   2/3 = /24   1/5 = /100   32

3/7 = /14   1/2 = /100   4/5 = /100   1/8 = /24   5/8 = /16   2/9 = /27   12/24 = /120   43

2/2 = /8   3/4 = /32   6/9 = /54   1/10 = /90   4/7 = /21   9/12 = /144   7/9 = /63   56

F-9

ORANGE COUNTY PUBLIC SCHOOLS
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see-hear

Add Fractions-like denom.*

1/3 + 1/3 =	5/10 + 2/10 =	2/15 + 6/15 =	2/9 + 4/9 =	10/10 + 2/10 =	2/4 + 1/4 =	16
1/2 + 1/2 =	1/7 + 9/7 =	3/10 + 4/10 =	4/5 + 3/5 =	1/4 + 1/4 =	2/2 + 6/2 =	30
1/4 + 2/4 =	1/9 + 3/9 =	6/4 + 2/4 =	3/10 + 7/10 =	1/4 + 3/4 =	1/5 + 9/5 =	45
2/4 + 1/4 =	1/7 + 5/7 =	3/8 + 1/8 =	2/6 + 5/6 =	4/10 + 5/10 =	1/7 + 6/7 =	58
2/2 + 3/2 =	6/2 + 1/2 =	2/7 + 4/7 =	1/9 + 7/9 =	1/2 + 3/2 =	2/6 + 5/6 =	70

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
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F-10

see-write

Add Fractions-unlike denom.

3/8 + 3/4 =	4/4 + 1/2 =	1/3 + 1/2 =	7/10 + 3/5 =	1/2 + 3/4 =	3/10 + 2/5 =	*15*
2/3 + 1/12 =	5/8 + 1/4 =	1/4 + 5/12 =	4/5 + 3/4 =	3/8 + 1/4 =	1/6 + 1/3 =	*31*
17/100 + 3/10 =	1/3 + 3/10 =	3/4 + 5/8 =	1/4 + 1/9 =	2/6 + 5/8 =	4/6 + 2/2 =	*54*
2/7 + 4/3 =	3/5 + 4/6 =	2/2 + 1/9 =	6/7 + 2/3 =	4/7 + 6/8 =	2/10 + 5/5 =	*78*
3/2 + 4/3 =	3/4 + 2/8 =	4/5 + 2/3 =	7/ 3+ 8/6 =	4/6 + 5/4 =	1/4 + 1/5 =	*97*

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

F-11

Add Fractions - mixed Nos. (no renaming)

1 1/9 +3 4/9	3 5/6 +8	6 2/3 +9 1/3	6 5/8 +7 1/8	5 1/4 +6 1/4	6 2/4 +5 3/4	3 1/6 +4 2/6	2 1/4 +5 2/4	8 7/8 +1 1/8	32
2 1/6 +4 4/6	7 1/4 +6 2/4	2 1/3 +1 1/3	1 7/8 +2 1/8	8 1/2 +9	61 1/2 +91	7 1/4 +2	9 2/5 +3 2/5	5 1/5 +4 3/5	64
43 3/7 +72	4 4/3 +1 2/3	63 1/2 +28	1 1/3 +7 1/3	5 3/10 +6 7/10	9 3/8 +2 1/8	2 2/6 +1 5/6	17 1/7 + 6 2/7	21 2/3 + 6	100
6 1/7 +3 5/7	10 4/5 + 2 1/5	11 1/9 + 3	2 1/2 +2 3/2	8 1/6 +5 4/6	5 2/2 +5 4/2	1 10/10 +2 2/10	4 1/4 +7	9 2/2 +2 6/2	135
16 4/5 + 4	3 1/7 +2 9/7	7 3/5 +4	1 2/3 +6 1/3	6 4/5 +8	14 2/3 + 6	5 4/7 +5 3/7	21 5/10 + 2	8 6/12 +1 3/12	171

F-12

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

Add Fractions- mixed nos.
(w/ renaming)

3 9/10 +8 1/4	2 1/2 +4 3/4	1 1/2 +8 2/3	3 1/2 +2 3/4	4 7/8 +3 1/16	7 3/5 +8 1/2	8 7/8 +1 1/2	26 9/10 +35 1/20	21 3/4 +19 3/8	40
2 2/3 +2 1/2	10 5/8 + 8 3/4	33 2/5 +47 3/10	6 5/8 +7 2/3	3 5/6 +8 1/2	10 5/8 + 7 3/4	8 7/8 +1 1/2	12 7/5 +17 3/10	61 1/2 +91 1/8	83
82 3/8 +72 1/4	6 7/12 +7 5/6	5 9/5 +2 3/15	7 1/4 +3 1/16	12 5/10 +18 1/2	18 3/6 + 6 5/18	41 3/3 +62 2/4	1 8/32 +9 2/8	7 12/24 +4 1/6	135
4 10/30 +4 2/3	16 5/9 + 2 6/18	9 7/24 +5 3/12	5 1/4 +6 2/8	3 1/6 +4 2/3	12 3/7 +6 6/4	2 3/2 +1 4/3	7 2/9 +7 4/4	15 2/10 +12 5/5	181
81 3/5 + 6 4/6	52 6/8 +10 4/7	17 2/7 +16 4/3	7 4/3 +8 9/12	12 6/9 + 3 1/27	1 2/5 +4 5/10	10 3/14 +10 2/7	2 6/6 +6 3/18	41 2/20 +19 4/5	232

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ORANGE COUNTY PUBLIC SCHOOLS
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see-write

F-13

Add Fractions-mixed nos.
(no renaming & renaming)

7 3/5	2 1/4	3 9/10	8 7/8	5 1/4	28 1/2	63 1/2	8 1/2	15 2/3	
+8 1/2	+5 2/4	+8 1/4	+1 1/8	+6 1/4	+75 2/9	+28	+9 1/4	+ 7 3/4	39
11 7/10	1 1/9	6 7/12	3 5/6	82 3/8	3 1/2	10 5/8	1 7/8	1 1/3	
+39 1/2	+3 4/9	+7 5/6	+8	+72 1/4	+2 3/4	+ 7 3/4	+2 1/8	+7 1/3	71
84 1/12	43 3/7	6 2/4	21 2/5	47 2/3	61 1/2	1 2/4	19 1/7	64 2/9	
+57 2/3	+72 3/14	+5 3/4	+32 1/10	+38 5/6	+91	+6 3/4	+36 3/14	+16 3/9	111
3 5/6	5 6/12	26 9/10	4 7/8	8 6/8	3 8/16	14 1/6	21 6/42	9 3/8	
+8 1/2	+4 5/6	+35 1/10	+3 1/16	+2 1/2	+7 2/16	+ 6 2/6	+14 2/7	+2 4/24	148
43 9/11	63 8/4	17 7/14	71 3/8	3 4/28	21 12/20	53 6/8	15 5/10	10 4/12	
+ 6 2/22	+ 7 9/16	+21 2/14	+ 6 5/8	+2 5/7	+ 6 10/20	+12 4/8	+11 2/40	+ 9 6/12	188

ORANGE COUNTY PUBLIC SCHOOLS
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F-14

see-write

Subtract Fractions-
like denom.*

12/7 - 6/7 =	5/9 - 3/9 =	4/5 - 1/5 =	9/10 - 2/10 =	7/5 - 3/5 =	5/3 - 3/3 =	13
13/8 - 7/8 =	12/5 = 4/5 =	4/6 - 2/6 =	2/10 - 1/10 =	11/12 - 7/12 =	2/8 - 1/8 =	27
8/12 - 4/12 =	5/9 - 1/9 =	6/11 - 4/11 =	3/9 - 2/9 =	2/3 - 1/3 =	3/4 - 2/4 =	41
5/8 - 4/8 =	4/4 - 3/4 =	3/10 - 1/10 =	3/4 - 1/4 =	13/14 - 7/14 =	2/2 - 1/2 =	69
9/12 - 3/12 =	16/9 - 8/9 =	5/11 - 2/11 =	5/6 - 4/6 =	4/8 - 4/8 =	8/28 = 7/28 =	85
6/10 - 3/10 =	7/8 - 3/8 =	4/5 - 2/5 =	5/8 - 1/8 =	14/17 - 2/17 =	3/22 - 1/22 =	101

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

F-15

Subtract Fractions-
unlike denom.

9/10 - 3/5 =	4/5 - 1/2 =	1/5 - 1/10 =	2/3 - 1/2 =	7/16 - 1/4 =	4/5 - 3/4 =	17
3/2 - 1/4 =	5/3 - 1/2 =	1/2 - 1/3 =	3/4 - 2/5 =	9/8 - 3/4 =	7/10 - 1/4 =	31
73/100 - 7/10 =	11/12 - 2/3 =	7/3 - 3/2 =	5/6 - 3/4 =	7/8 - 1/4 =	3/8 - 1/4 =	47
13/16 - 3/4 =	7/10 - 3/100 =	1/2 - 1/4 =	3/12 - 1/4 =	2/3 - 1/4 =	3/4 - 1/5 =	65
3/5 - 1/2 =	5/12 - 2/6 =	4/10 - 1/5 =	9/8 - 2/3 =	6/2 - 2/4 =	3/1 - 1/8 =	82
5/2 - 2/7 =	4/3 - 1/5 =	9/3 - 3/4 =	6/9 - 1/2 =	9/3 - 8/12 =	3/1 - 1/8 =	104

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
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ORLANDO, FLORIDA

see-write

Subtract Fractions-
mixed nos. (no renaming)

6 4/9	43 9/10	8 2/3	20 5/8	17 6/7	4 3/5	37 11/12	9 2/5	3 3/6	
-1 2/9	-23 6/10	-2 1/3	- 9 2/8	-15 2/7	-1 1/5	-33 6/12	-6 1/5	-2 2/6	31
3 3/6	12 3/4	18 3/3	44 7/10	55 2/4	11 8/12	25 4/7	34 5/7	9 10/12	
-2 2/6	- 3 2/4	- 7 1/3	- 6 4/10	-17 1/4	- 4 3/12	-12 2/7	-28 3/7	-2 3/12	65
20 5/6	64 4/8	16 8/9	5 5/8	15 4/4	19 7/9	26 8/8	51 11/9	21 4/5	
-15 4/6	-41 3/8	- 4 7/9	-3 3/8	- 6 3/4	- 7 5/9	- 4 4/8	-20 10/9	-16 3/5	98
9 12/8	34 6/6	8 5/5	15 11/6	12 2/2	2 7/8	28 10/7	91 5/7	64 8/9	
-4 5/8	-30 3/6	-5 2/5	- 4 5/6	- 8 1/2	-1 3/8	-19 7/7	- 8 2/7	- 3 4/9	128
17 9/4	75 7/3	31 6/6	27 3/10	52 4/9	86 5/5	47 10/10	66 12/8	71 7/7	
-13 3/4	-50 4/3	- 9 5/6	-25 1/10	-36 2/9	-60 1/5	-23 9/10	-33 9/8	- 1 6/7	164

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

F-17
Subtract Fractions-mixed nos. (renaming)

44 9/10	16 8/9	7 4/9	27 9/5	21 5/8	38 2/5	16 6/7	49 75/80	9 2/3	
-24 6/8	-12 3/18	-2 3/12	-17 10/15	-18 2/5	- 6 4/25	-10 4/14	- 5 8/10	-3 1/4	43
51 3/3	5 3/5	62 10/12	38 11/12	73 6/9	10 2/5	84 5/9	4 3/6	95 3/4	
-30 2/9	-2 1/3	-15 5/24	-34 4/6	-21 15/72	- 7 1/6	-60 8/45	-3 1/4	- 6 4/8	85
13 3/4	10 16/20	26 5/7	14 16/10	12 8/12	17 25/7	56 2/4	22 20/18	45 7/10	
- 4 2/5	- 5 4/5	-13 2/3	- 9 31/50	- 4 2/3	-11 6/21	-18 1/2	-16 7/9	- 7 2/5	116
33 6/9	19 2/3	44 5/8	35 5/7	56 16/5	10 10/12	67 36/10	21 5/6	78 3/4	
- 8 3/27	- 8 1/4	- 7 2/16	-29 2/4	-31 25/25	- 3 2/4	- 2 14/20	-16 1/4	-15 7/12	162
64 7/8	89 18/3	17 8/9	37 10/15	25 14/27	36 2/9	48 7/8	52 10/4	63 7/5	
-42 3/4	-50 9/21	- 5 5/6	- 2 7/10	- 5 3/9	-16 1/45	-31 3/24	- 9 3/16	- 4 9/45	211

ORANGE COUNTY PUBLIC SCHOOLS
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see-write

F-18

Subtract Fractions-mixed nos.
(no renaming & renaming)

15 6/7	6 4/9	10 10/12	64 7/8	12 3/4	9 2/5	19 2/3	56 2/4	4 3/5	
- 9 2/7	-1 2/9	- 3 2/4	-42 3/4	- 3 2/4	-6 1/5	- 8 1/4	-18 1/2	-1 1/5	29
11 8/12	26 5/7	44 7/10	16 8/9	38 11/12	20 5/6	4 3/6	13 3/4	21 5/8	
- 4 3/12	-13 2/3	- 6 4/10	- 4 7/9	-34 4/6	-15 4/6	-3 1/4	- 4 2/5	-18 2/5	66
34 5/7	9 2/3	18 1/2	10 6/9	7 1/2	8 7/8	10 2/3	12 3/5	8 4/3	
-28 3/7	-3 1/4	- 9 2/5	- 6 2/3	-3 1/4	-5 3/4	- 7 1/3	- 9 1/2	-3 1/2	94
15 3/4	16 1/2	8 1/2	23 2/3	12 3/4	7 3/4	9 3/4	8 3/4	6 2/3	
-11 3/8	-10 1/4	-2 1/3	-17 1/6	- 3 1/8	-2 1/2	-2 1/2	-1 1/8	-1 7/12	122
7 5/6	8 5/6	4 11/15	7 9/10	14 5/5	25 4/7	36 16/8	6 10/10	8 9/27	
-6 1/4	-5 7/9	-2 7/10	-3 3/5	- 6 4/20	-20 7/21	- 4 4/40	-4 2/5	-3 3/9	158

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see-write

F-19

Add & Subtract Fractions-mixed nos. (No renaming & renaming)

76 3/5 +97 1/10	10 9/3 - 6 2/3	8 7/8 -5 3/4	8 7/7 +1 1/2	16 9/12 + 4 1/12	9 7/9 -5 2/18	6 7/12 +7 5/6	14 5/5 -10 2/20	25 1/10 + 5 2/10	36
12 3/5 - 9 1/2	64 3/8 +38 1/4	9 2/5 +3 1/4	36 9/12 - 6 4/12	15 3/4 -11 3/8	8 1/2 -2 1/3	47 6/6 + 2 9/6	52 12/7 +6 2/14	6 9/9 +6 3/9	74
7 9/10 -3 3/5	48 2/3 +38 5/6	8 7/9 -5 4/6	15 16/10 + 7 2/10	26 7/14 - 5 2/7	6 2/3 -1 7/12	43 3/7 +72 3/14	51 3/20 -42 1/20	17 5/13 + 4 6/13	114
11 7/10 +39 1/2	9 3/4 -2 1/2	8 1/2 +9 1/4	28 1/2 +75 2/9	16 5/25 - 9 4/25	32 7/12 + 3 9/12	12 3/4 - 3 1/8	19 4/16 - 9 3/16	43 9/9 + 7 3/9	158
18 6/43 - 9 2/43	28 14/27 + 8 6/27	49 16/8 + 3 2/4	12 25/5 - 4 36/10	50 17/9 +10 8/18	16 3/7 -15 2/7	27 3/7 - 7 4/21	64 5/10 + 5 9/20	72 9/45 + 7 7/9	209

ORANGE COUNTY PUBLIC SCHOOLS
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F-20

see-write

Multiply two proper fractions

1/3 x 2/5 =	4/9 x 4/5 =	3/8 x 1/2 =	1/5 x 3/5 =	2/4 x 2/3 =	1/2 x 4/7 =	7/8 x 1/5 =	2/3 x 3/4 =	7/8 x 2/3 =	29
4/5 x 2/3 =	3/6 x 5/6 =	1/2 x 4/5 =	1/5 x 8/9 =	9/10 x 2/5 =	4/7 x 1/7 =	8/9 x 2/3 =	3/8 x 2/7 =	3/6 x 3/5 =	59
1/8 x 1/6 =	7/10 x 4/8 =	5/7 x 4/9 =	7/9 x 1/2 =	1/4 x 5/8 =	5/6 x 3/4 =	2/7 x 1/3 =	3/5 x 2/7 =	2/5 x 5/6 =	90
5/7 x 3/11 =	4/6 x 3/5 =	1/8 x 6/7 =	8/11 x 2/3 =	11/12 x 3/4=	2/3 x 2/3 =	5/9 x 2/7 =	1/5 x 2/5 =	1/7 x 3/7 =	121
1/6 x 4/1 =	1/4 x 2/8 =	4/5 x 1/10 =	5/9 x 5/7 =	2/7 x 4/6 =	2/4 x 3/6 =	1/9 x 1/7 =	1/5 x 3/5 =	1/3 x 1/9 =	148

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see-write

Multiply-whole no. by proper fraction

7 x 2/7 =	9 x 2/3 =	5 x 2/7 =	3 x 7/11 =	6 x 4/5 =	4 x 7/8 =	4 x 3/4 =	6 x 1/8 =	9 x 2/3 =	27
2 x 3/4 =	5 x 3/11 =	10 x 1/5 =	6 x 5/6 =	3 x 1/3 =	9 x 5/8 =	7 x 2/3 =	8 x 4/6 =	5 x 2/3 =	53
1 x 7/9 =	4 x 2/5 =	12 x 2/4 =	5 x 1/5 =	7 x 7/5 =	3 x 1/4 =	9 x 4/6 =	2 x 2/8 =	6 x 6/2 =	75
10 x 2/3 =	8 x 1/8 =	4 x 2/9 =	9 x 1/4 =	5 x 6/7 =	3 x 8/12 =	1 x 1/16 =	7 x 4/5 =	2 x 3/6 =	99
5 x 1/2 =	2 x 3/8 =	6 x 4/3 =	1 x 3/7 =	3 x 2/9 =	7 x 9/11 =	9 x 3/9 =	4 x 4/5 =	8 x 3/6 =	123

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
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ORLANDO, FLORIDA

F-22

see-write

Multiply-mixed no. by proper fraction

1 7/8 X 1/2 =	5 3/10 X 1/5 =	3 1/8 X 2/5 =	5 5/8 X 2/3 =	4 3/4 X 7/8 =	6 1/3 X 1/8 =	22
7 3/4 X 3/6 =	3 3/4 X 5/8 =	2 3/4 X 6/7 =	4 4/5 X 2/4 =	1 1/2 X 1/2 =	2 2/3 X 1/4 =	37
4 8/9 X 1/6 =	9 9/10 X 4/5 =	5 7/8 X 3/4 =	3 3/10 X 9/10 =	5 6/8 X 4/9 =	8 3/7 X 1/4 =	64
6 4/5 X 3/5 =	5 2/6 X 4/7 =	1 1/2 X 1/4 =	8 3/6 X 1/2 =	7 2/3 X 1/6 =	4 4/9 X 2/27 =	86
8 1/2 X 1/2 =	3 7/12 X 4/5 =	9 1/10 X 2/5 =	2 5/20 X 1/15 =	7 2/5 X 9/10 =	3 3/5 X 3/4 =	111
4 7/12 X 4/5 =	6 6/7 X 2/16 =	9 4/9 X 3/4 =	12 3/8 X 4/9 =	8 1/20 X 6/5 =	5 2/4 X 1/8 =	134

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Divide two proper fractions

F-23

4/4 ÷ 6/7 =	2/3 ÷ 1/2 =	2/3 ÷ 10/2 =	1/5 ÷ 1/4 =	6/8 ÷ 1/2 =	1/4 ÷ 1/2 =	2/9 ÷ 3/5 =	*20*
4/9 ÷ 1/2 =	2/9 ÷ 5/6 =	2/3 ÷ 4/5 =	8/10 ÷ 1/5 =	1/6 ÷ 5/8 =	2/7 ÷ 4/9 =	6/7 ÷ 3/4 =	*37*
3/5 ÷ 2/20 =	1/9 ÷ 3/7 =	2/6 ÷ 4/5 =	2/5 ÷ 3/10 =	1/4 ÷ 2/5 =	1/2 ÷ 1/8 =	15/15 ÷ 1/2 =	*50*
6/7 ÷ 3/10 =	3/4 ÷ 1/3 =	2/7 ÷ 1/2 =	2/9 ÷ 5/8 =	2/7 ÷ 1/3 =	1/6 ÷ 1/2 =	2/7 ÷ 1/4 =	*69*
9/12 ÷ 1/4 =	7/9 ÷ 2/5 =	6/12 ÷ 2/3 =	2/7 ÷ 1/4 =	1/10 ÷ 1/2 =	20/20 ÷ 1/5 =	5/15 ÷ 1/3 =	*83*

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

F-24

Divide-Proper Fraction by whole no.

5 ÷ 3/8 =	3 ÷ 1/6 =	4 ÷ 2/3 =	5 ÷ 1/4 =	2 ÷ 1/2 =	6 ÷ 6/8 =	7 ÷ 4/5 =	17
9 ÷ 1/5 =	6 ÷ 4/5 =	2 ÷ 5/8 =	7 ÷ 3/4 =	4 ÷ 1/3 =	11 ÷ 5/6 =	2 ÷ 1/6 =	35
3 ÷ 2/4 =	8 ÷ 2/5 =	4 ÷ 1/7 =	5 ÷ 3/4 =	9 ÷ 2/8 =	12 ÷ 3/5 =	2 ÷ 2/7 =	55
21 ÷ 3/5 =	7 ÷ 2/6 =	9 ÷ 3/7 =	15 ÷ 1/3 =	5 ÷ 7/8 =	4 ÷ 1/8 =	3 ÷ 5/7 =	75
8 ÷ 2/5 =	4 ÷ 2/6 =	3 ÷ 7/8 =	21 ÷ 2/3 =	9 ÷ 2/9 =	7 ÷ 4/9 =	17 ÷ 3/10 =	97

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

F-25

Divide-Proper Fraction
by mixed no.

1 7/8 ÷ 1/2 =   6 1/2 ÷ 2/3 =   1 1/2 ÷ 2/5 =   1 2/3 ÷ 1/5 =   3 1/2 ÷ 1/7 =   10 1/3 ÷ 3/9 =   19

4 2/6 ÷ 3/5 =   1 1/5 ÷ 3/7 =   3 2/3 ÷ 5/8 =   2 1/7 ÷ 1/3 =   6 1/8 ÷ 1/4 =   12 1/6 ÷ 5/8 =   44

4 5/8 ÷ 3/4 =   5 1/2 ÷ 1/6 =   9 1/4 ÷ 7/8 =   4 7/8 ÷ 4/5 =   2 1/3 ÷ 5/6 =   11 1/5 ÷ 2/3 =   71

5 3/4 ÷ 2/7 =   8 2/5 ÷ 3/8 =   2 1/6 ÷ 4/7 =   7 3/5 ÷ 1/8 =   3 3/7 ÷ 2/3 =   1 1/2 ÷ 1/6 =   94

7 3/7 ÷ 6/8 =   12 2/9 ÷ 3/6 =   4 1/2 ÷ 1/8 =   3 4/5 ÷ 3/8 =   2 1/2 ÷ 1/5 =   14 1/4 ÷ 2/5 =   119

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

F-26

Multiply & Divide
(fractions w/ mixed nos.)

6 1/2 ÷ 2/3 =	4 3/4 X 7/8 =	1 2/3 ÷ 1/5 =	5 3/10 X 1/5 =	1 7/8 X 1/2 =	7 2/5 ÷ 1/10 =	23
7 3/4 X 3/6 =	4 2/6 ÷ 3/5 =	2 3/4 X 6/7 =	3 2/3 ÷ 5/8 =	1 1/2 X 1/2 =	4 2/3 X 1/9 =	46
6 1/8 ÷ 1/4 =	4 8/9 X 1/6 =	5 7/8 X 3/4 =	2 2/5 ÷ 3/10 =	4 7/8 ÷ 4/5 =	9 1/4 X 1/2 =	73
5 6/8 X 4/9 =	2 1/6 ÷ 4/7 =	8 3/7 X 1/4 =	5 3/4 ÷ 2/7 =	3 3/7 ÷ 2/3 =	8 1/2 X 1/8 =	97
3 2/7 ÷ 5/6	9 1/10 ÷ 1/2 =	21 3/4 X 1/4 =	32 1/4 X 1/5 =	4 2/7 ÷ 4/9 =	7 1/10 X 1/2 =	122

MEASUREMENT

MS-1	Measurement Words - Days, Months, Time
MS-2	Measurement Words - Linear, Liquid, Weight & Money
MS-3	Measurement Abbreviations
MS-4	Time - Hour & Half Hr.*
MS-4a	Time - Hr.*
MS-4b	Time - Half Hr.*
MS-5	Time - 1/4 Hr.*
MS-6	Time - 5 mins.
MS-7	Time - To min.
MS-8	Equiv. Values - Time
MS-9	Days & Months Direction Sheet*
MS-10	Days Sequence
MS-11	Months Sequence
MS-12	Calendar - Month, Day, Year*
MS-13	Equiv. Values - Calendar
MS-14	Say name of Coins (1¢ to $1.00)
MS-15	Say value of Coins to 25¢
MS-16	Write value of Coins to 25¢
MS-17	Say value of Coins to $1.00
MS-18	Write value of Coins to $1.00
MS-19	Counting Coins to 25¢
MS-20	Counting Coins to $1.00
MS-21	Counting Coins to $5.00
MS-22	Sums & Differences ($) (No reg. & reg.)
MS-23	Make change from $1.00*

MS-24	Equiv. Values - Linear
MS-25	Equiv. Values - Liquid
MS-26	Metric Words
MS-26a	Linear Words
MS-26b	Volume Words
MS-26c	Mass Words
MS-27	Metric Unit
MS-28	Metric Symbols
MS-28a	Linear Symbols
MS-28b	Volume Symbols
MS-28c	Mass Symbols
MS-29	Metric Term to Metric Value
MS-30	Metric Value to Metric Prefix

MS-1

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Measurement Words
(Days, Months, Time)

June	Friday	August	Tuesday	February	September	May	December	8
month	day	Thursday	Sunday	year	November	hour	October	16
second	April	week	January	July	minute	Wednesday	March	24
Monday	Saturday	Thursday	Sunday	day	August	year	July	32
March	November	May	April	second	Monday	minute	Friday	40
June	October	Wednesday	September	month	February	Saturday	December	48
Tuesday	hour	week	January	May	March	October	minute	56
July	day	February	November	month	hour	year	December	64
week	second	Thursday	Tuesday	Sunday	Wednesday	Friday	Monday	72
June	January	August	Saturday	April	September	July	November	80
week	second	Saturday	hour	February	May	October	June	88
Friday	month	March	day	Tuesday	Wednesday	August	Sunday	96
minute	Thursday	Monday	September	year	April	December	January	104

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

MS-2

Measurement Words
(Linear, Liquid, Weight
& Money)

pound	cup	feet	dime	inch	foot	pint	7
gallon	yard	half dollar	penny	quart	nickel	dollar	15
ounce	mile	ton	quarter	dime	ton	feet	22
half dollar	mile	inch	quart	foot	pound	nickel	30
cup	ounce	yard	gallon	dollar	quarter	penny	37
pint	half dollar	pound	ounce	gallon	dollar	ton	45
dime	pint	quart	penny	mile	feet	quarter	52
cup	nickel	foot	inch	yard	inch	half dollar	60
penny	ounce	pint	quarter	cup	dollar	dime	67
gallon	nickel	quart	ton	pound	yard	feet	74
mile	foot	ton	nickel	inch	pound	dime	81
gallon	quarter	half dollar	penny	ounce	cup	mile	89
feet	dollar	quart	foot	yard	pint	cup	96

600

601

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

MS-3

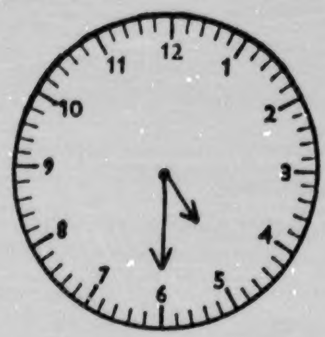
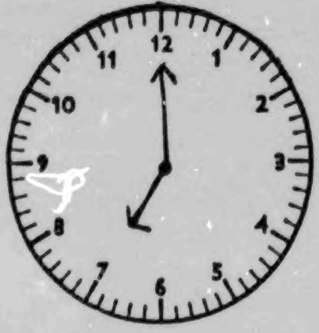
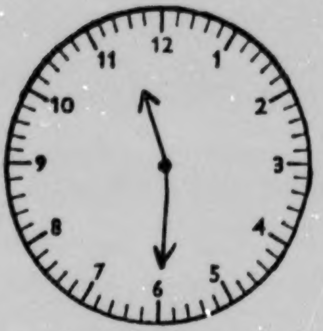
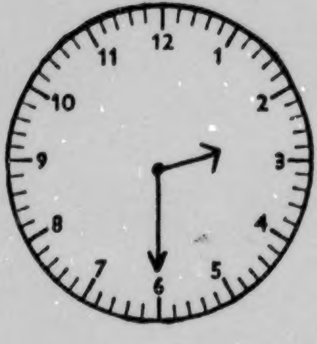
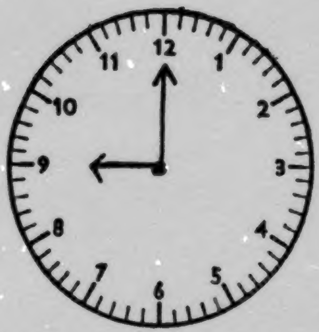
Measurement Abbreviations

Feb.	Sept.	in.	Wed.	wk.	Sat.	Fri.	Apr.	sec.	ft.	10
mo.	yd.	gal.	qt.	Dec.	Mon.	Jan.	mi.	Oct.	lb.	20
hr.	Aug.	Thurs.	Tues.	min.	oz.	Sun.	pt.	yr.	Mar.	30
Nov.	ft.	Nov.	Sept.	yr.	yd.	Aug.	Feb.	Tues.	Wed.	40
Oct.	Sat.	hr.	Dec.	mi.	Sun.	oz.	qt.	min.	lb.	50
pt.	in.	Mon.	Thurs.	gal.	Jan.	mo.	Apr.	sec.	wk.	60
Fri.	Mar.	Sat.	Aug.	Wed.	Feb.	ft.	oz.	qt.	in.	70
mi.	Apr.	pt.	Thurs.	Oct.	Tues.	min.	Mon.	Dec.	yr.	80
Nov.	Sept.	lb.	Fri.	gal.	Mar.	hr.	yd.	wk.	Sun.	90
mo.	Jan.	sec.	lb.	Thurs.	Sat.	hr.	oz.	Mar.	mo.	100
Apr.	Oct.	gal.	sec.	Dec.	ft.	Nov.	Aug.	Feb.	min.	110
yd.	Fri.	yr.	mi.	Sun.	wk.	Jan.	in.	qt.	Feb.	120
Sept.	in.	Wed.	wk.	Sat.	Fri.	Apr.	sec.	ft.	mo.	130

OCPS ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-4
(1 & 1/2 hr.)*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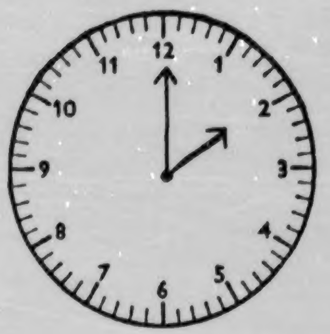
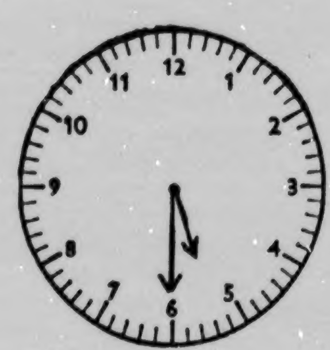
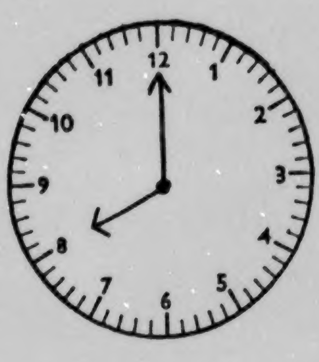
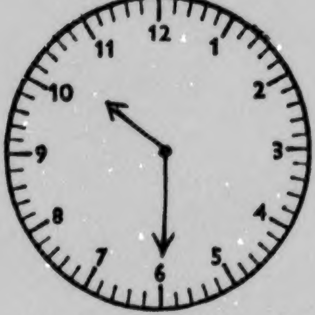
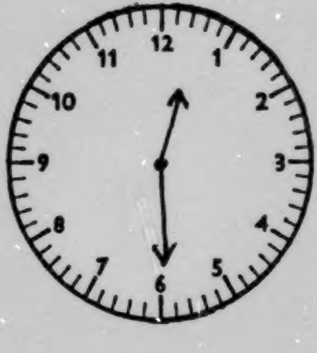
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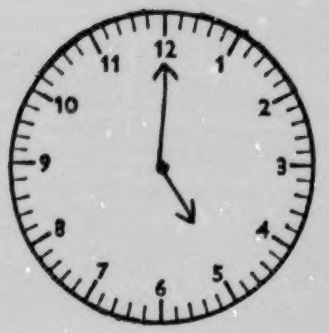
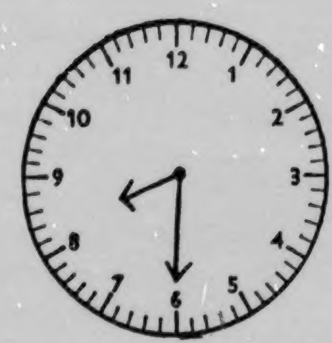
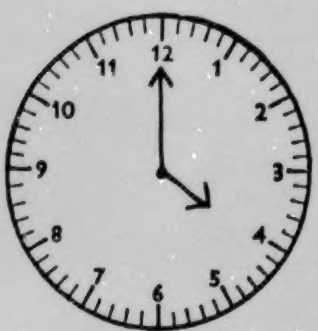
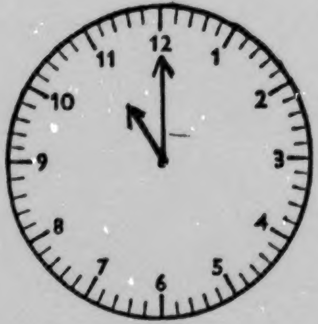
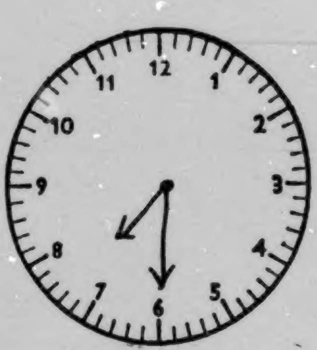
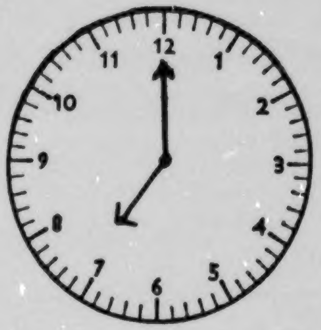





54

see-write

MS-4a
(1 hr.) *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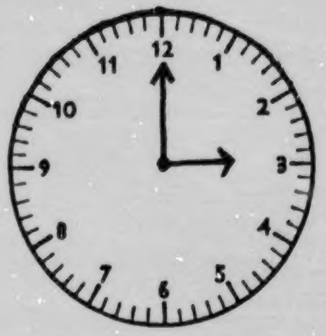
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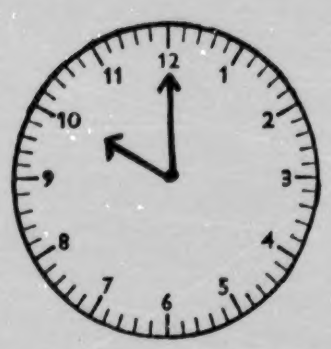
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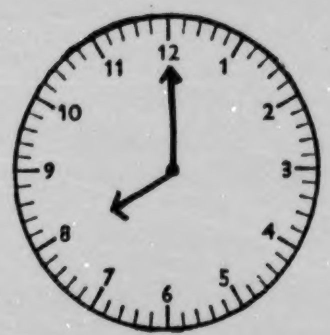
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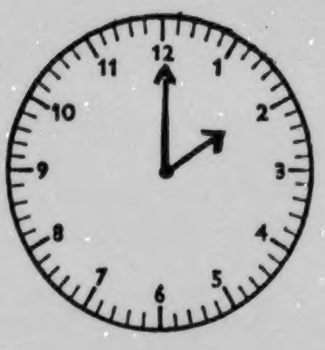
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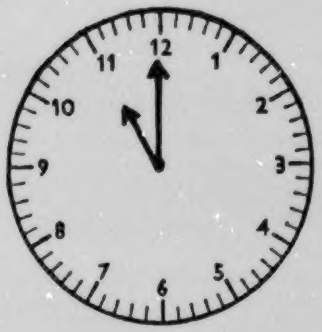
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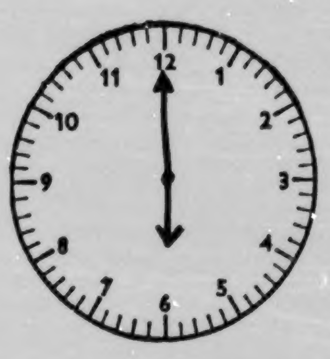
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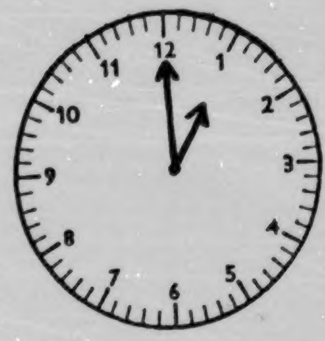
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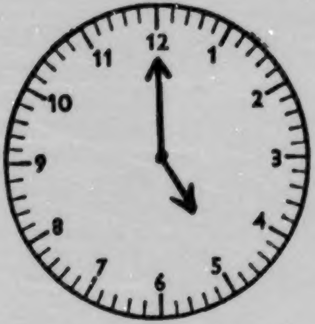
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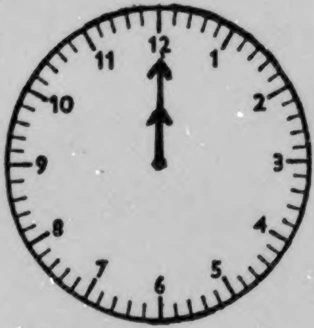
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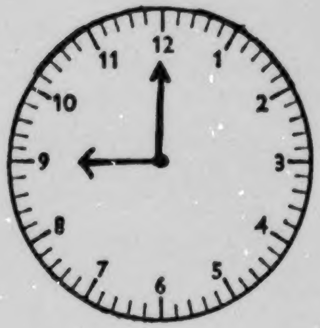
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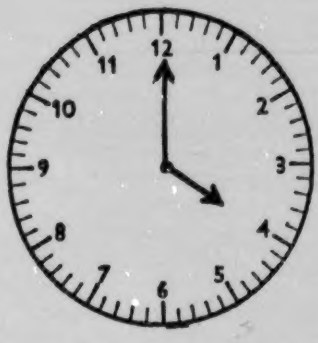
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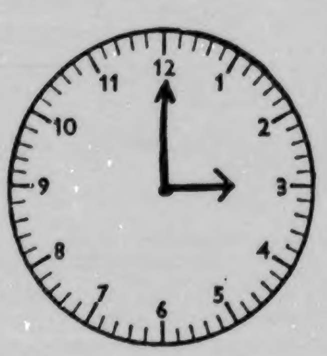
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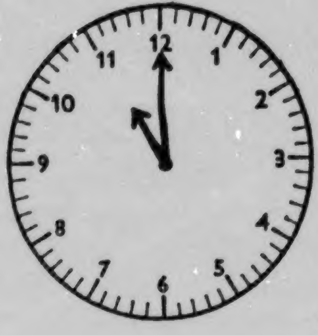
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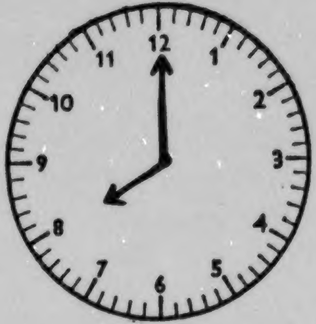
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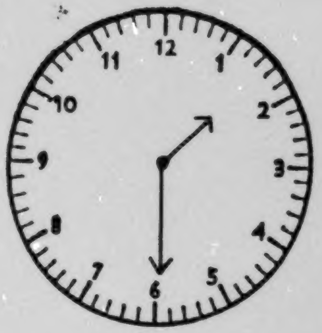
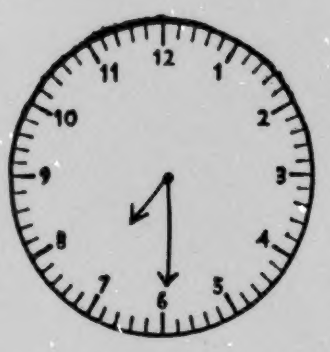
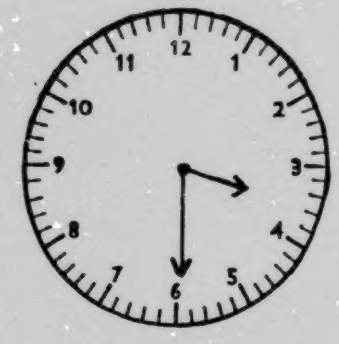
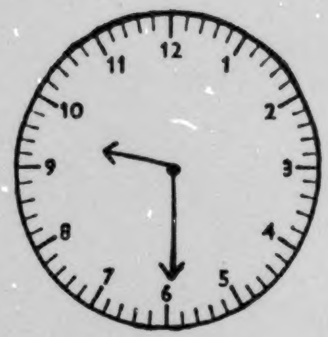
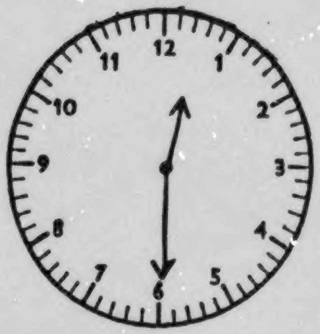
OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-4b
(1/2 hr.)

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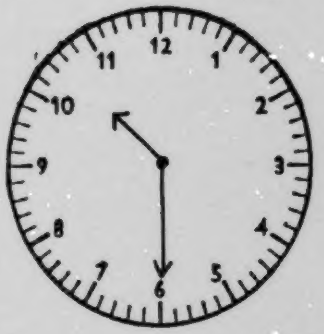
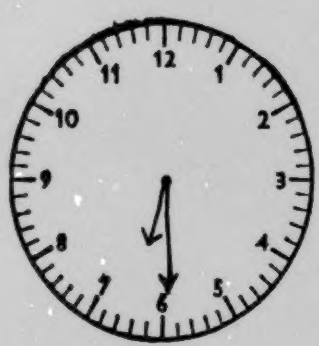
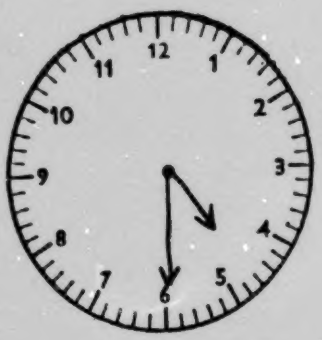
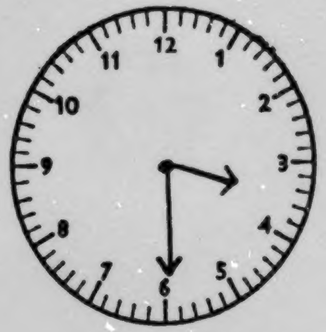
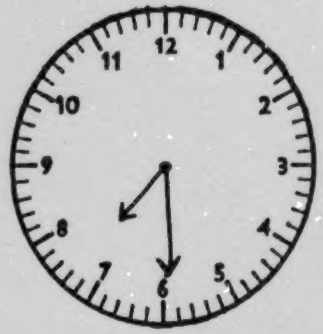

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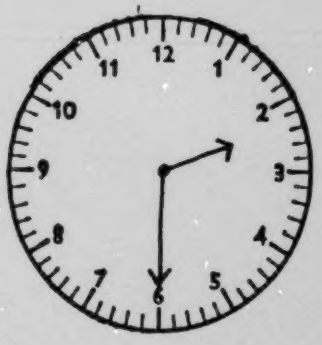
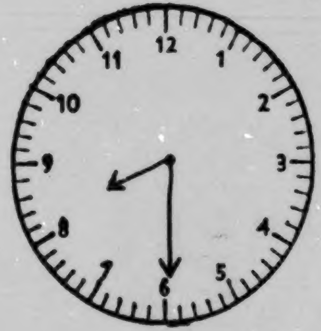
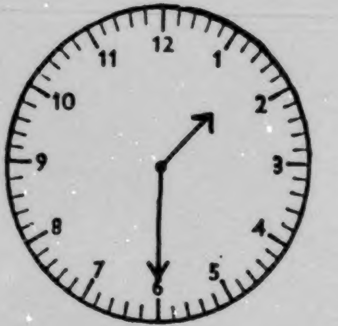
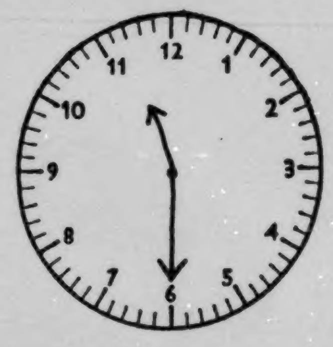
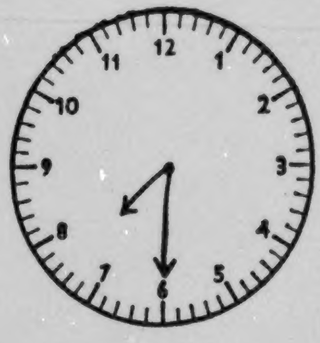

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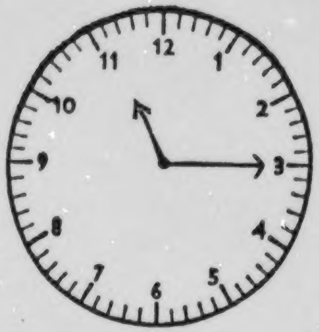
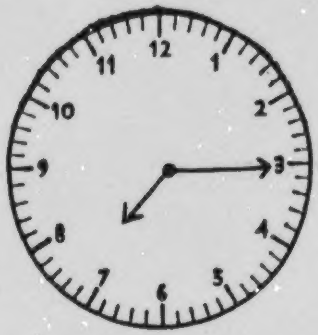
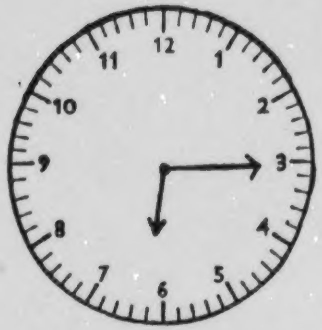
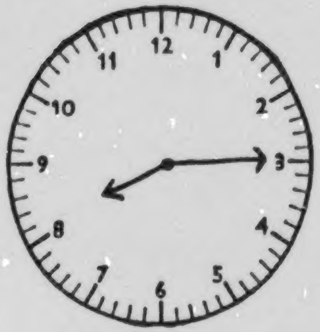
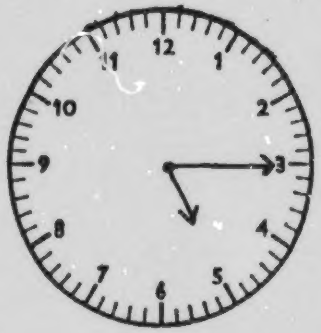
OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-5
(1/4 hr.)*

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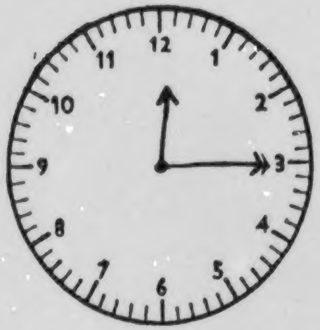
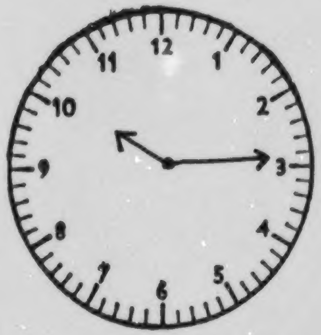
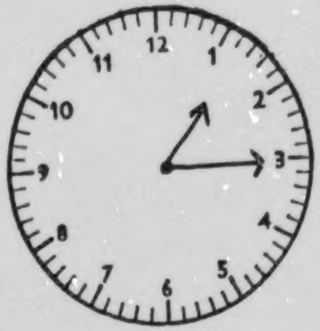
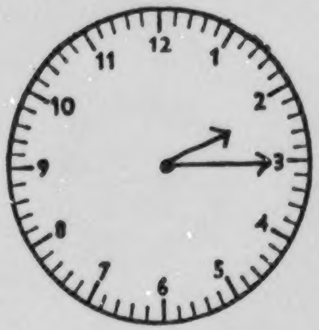
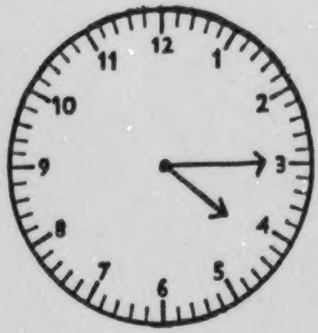

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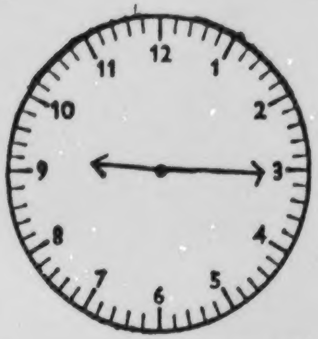
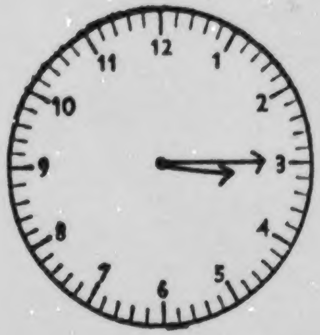
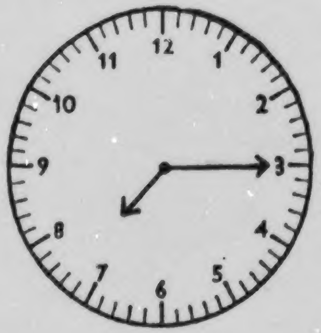
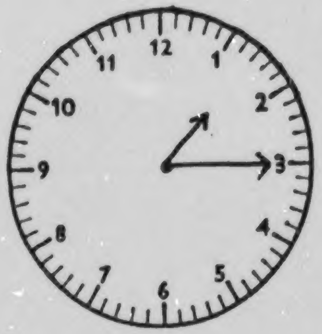
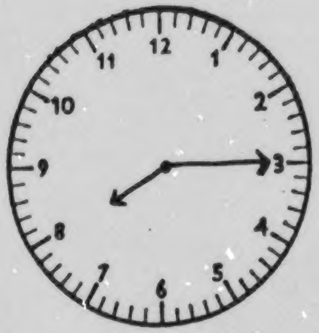






53

610

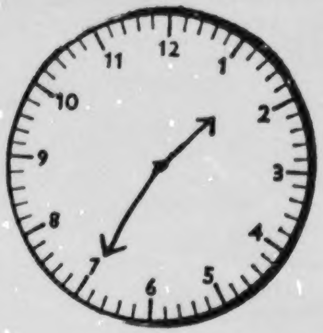
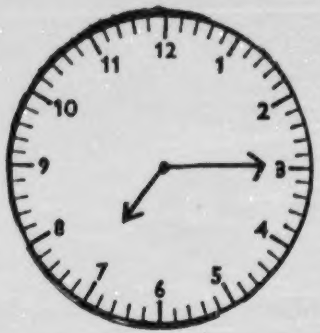
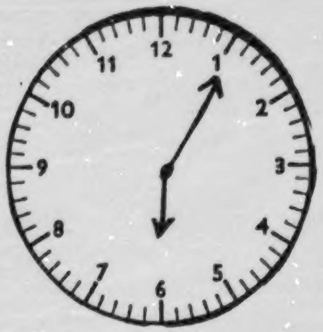
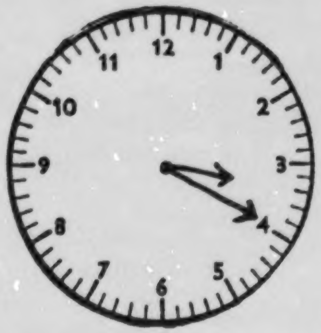
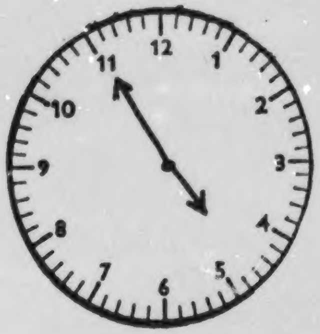
611

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-6
(5 mins.)

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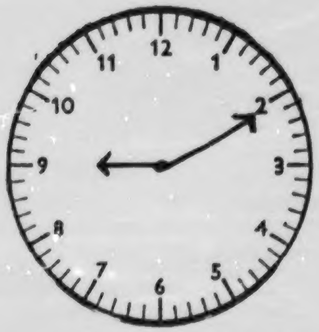
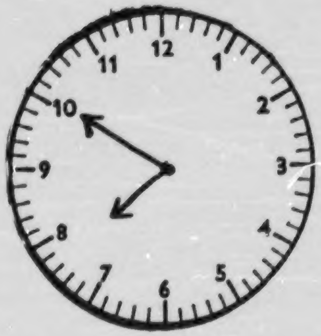
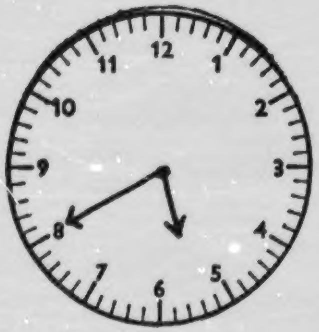
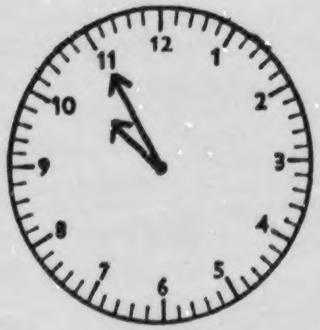
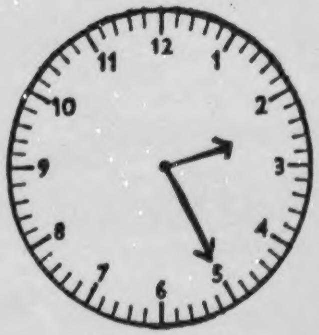

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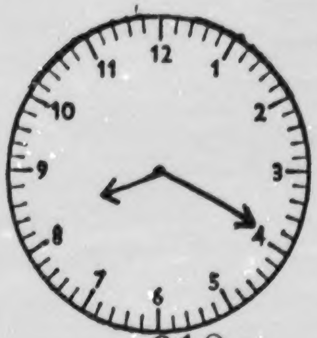
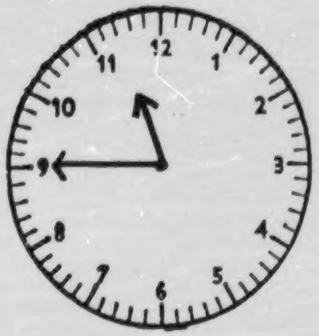
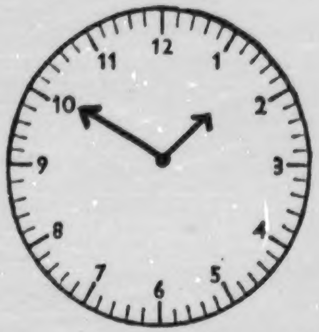
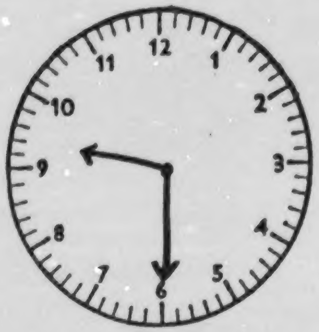
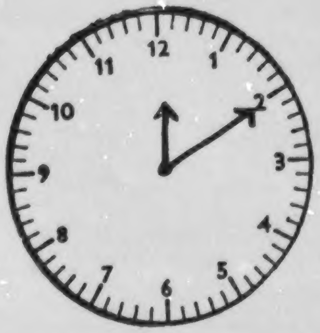






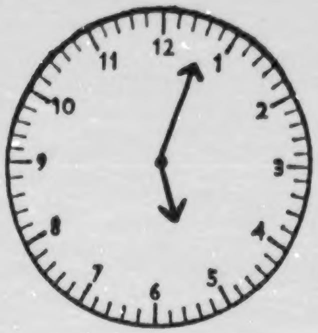
55

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

MS-7
To Min.

see-write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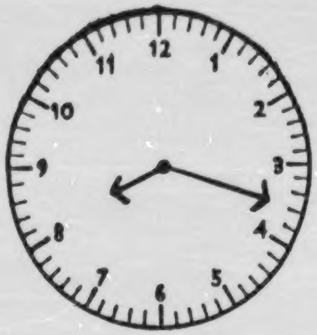
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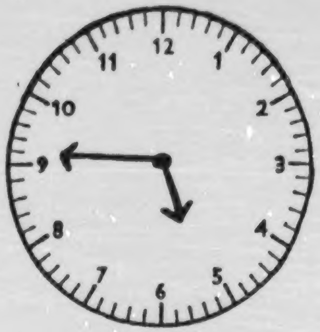
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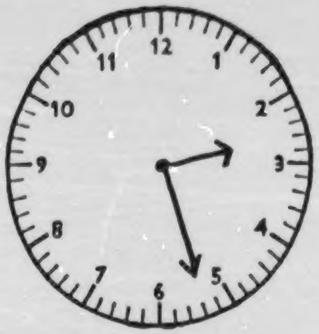
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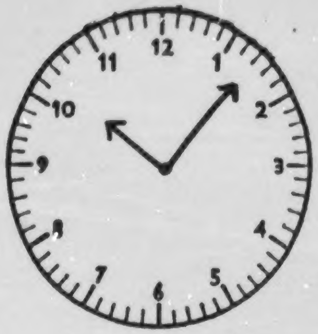
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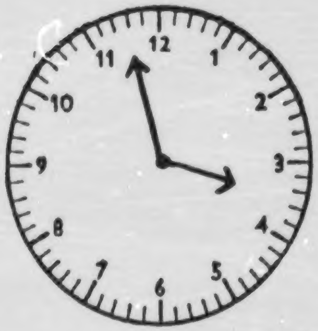
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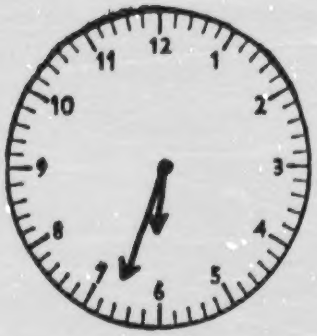
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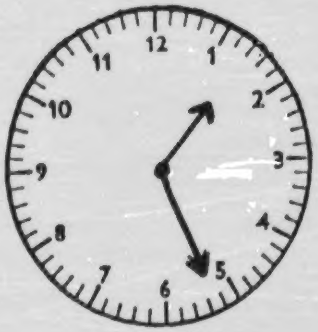
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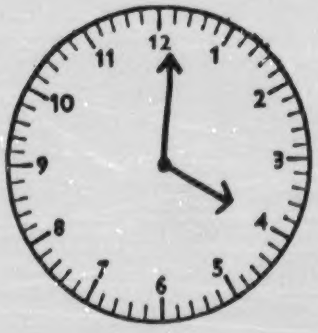
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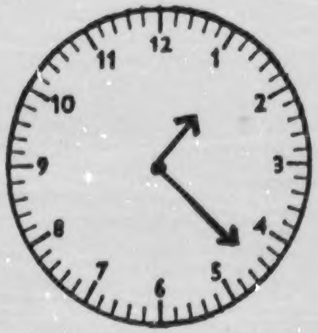
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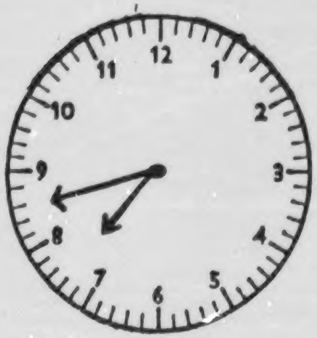
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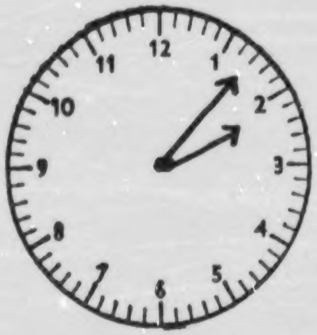
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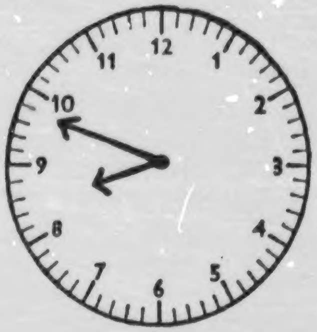
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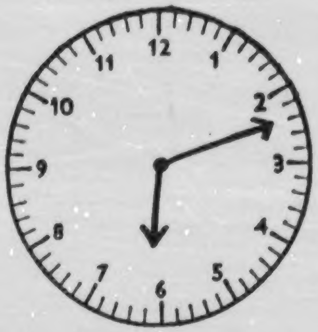
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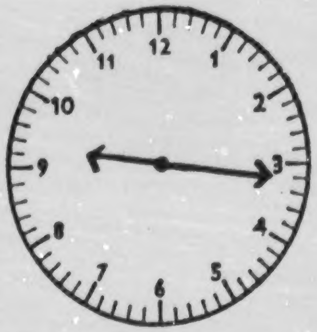
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52

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-8
Equiv. Values-Time

1 day = ___ hrs. 60 secs. = ___ min. 1 hr. = ___ mins. 60 mins. = ___ hr. 6

30 min. = ___ hr. 1 hr. = ___ min. 24 hrs. = ___ day 1/2 day = ___ hrs. 13

1/4 hr. = ___ mins. 1 min. = ___ secs. 3/4 hr. = ___ mins. 1/2 hr. = ___ mins. 21

3/4 hr. = ___ min. 30 mins. = ___ hr. 24 hrs. = ___ day 1 hr. = ___ mins. 28

1 min. = ___ secs. 1/4 hr. = ___ mins. 1/2 hr. = ___ mins. 1/2 day = ___ hrs. 36

1 day = ___ hrs. 60 secs. = ___ mins. 12 hrs. = ___ day 60 mins. = ___ hr. 42

1/2 hr. = ___ mins. 1/2 day = ___ hrs. 1 hr. = ___ mins. 24 hrs. = ___ day 49

60 secs. = ___ min. 1/4 hr. = ___ mins. 3/4 hr. = ___ mins. 1 min. = ___ secs. 56

1 day = ___ hrs. 30 mins. = ___ hr. 12 hrs. = ___ day 1/4 hr. = ___ mins. 64

1 hr. = ___ mins. 60 secs. = ___ mins. 24 hrs. = ___ day 3/4 hr. = ___ mins. 70

60 mins. = ___ hr. 15 mins. = ___ hr. 12 hrs. = ___ day 1 min. = ___ secs. 77

1/4 hr. = ___ mins. 24 hrs. = ___ day 1/2 hr. = ___ mins. 1/2 day = ___ hrs. 84

24 hrs. = ___ day 3/4 hr. = ___ mins. 1 min. = ___ secs. 1/2 day = ___ hrs. 91

think-say

MS-9

(Days & Months Direction Sheet)

DIRECTIONS:

The student says the days or months in sequence repeatedly for one minute.
One correct count is given for each word the student says in correct sequence.
Any omissions are counted as errors.

MS-10

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Days Sequence

Sunday	________	Tuesday	________	Thursday	________	Saturday	________	27
Monday	________	Wednesday	________	Friday	________	________	Monday	56
Tuesday	________	Thursday	________	Saturday	________	________	Tuesday	83
Wednesday	________	________	Saturday	________	________	Tuesday	________	118
Thursday	________	________	Sunday	________	________	Wednesday	________	154
Friday	________	________	Monday	________	________	Thursday	________	191
Saturday	________	________	Tuesday	________	________	Friday	________	225
Sunday	________	________	Wednesday	________	________	Saturday	________	261
Monday	________	________	Thursday	________	________	Sunday	________	297
Tuesday	________	Thursday	________	________	Sunday	________	________	340
________	________	Saturday	________	________	Tuesday	________	________	372
Tuesday	________	________	Friday	________	Sunday	Monday	________	402

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-11
Months Sequence

January	________	March	________	May	________	July	________	21
September	________	November	________	________	February	________	April	48
May	________	________	August	________	October	________	December	73
January	________	March	________	________	June	________	________	99
September	________	November	________	January	________	________	April	127
May	________	July	________	________	October	________	December	154
________	February	________	April	________	June	________	August	173
September	________	________	December	________	________	March	________	208
________	June	________	August	________	October	________	________	240
January	________	________	April	________	________	July	________	266
________	________	November	________	________	February	________	________	300
May	________	July	________	________	October	________	________	335

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-12
Month, Day, Year ★

Write the date by each symbol

AUGUST 1982

S	M	T	W	Th	F	S
		1	2	3	4	5
6	$\boxed{7}$	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	㉙	30	31		

MAY 1982

S	M	T	W	Th	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	$\boxed{13}$	14	15	16	17	18
19	20	21	22	23	24	25
26	27	㉘	29	30	31	

OCTOBER 1983

S	M	T	W	Th	F	S
					1	2
3	$\boxed{4}$	5	6	7	8	9
10	11	12	13	14	15	⑯
17	18	19	20	21	22	23
24	25	26	27	28	29	30

APRIL 1980

S	M	T	W	Th	F	S
	1	2	3	4	5	6
7	8	⑨	10	11	12	13
14	15	16	17	18	$\boxed{19}$	20
21	22	23	24	25	26	27
28	29	30	31			

☐ ______________ ☐ ______________ ☐ ______________ ☐ ______________ 46

○ ______________ ○ ______________ ○ ______________ ○ ______________ 95

JANUARY 1975

S	M	T	W	Th	F	S
					1	2
3	4	5	6	7	8	9
10	⑪	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	$\boxed{30}$

DECEMBER 1983

S	M	T	W	Th	F	S
		1	2	3	4	⑤
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	$\boxed{25}$	26
27	28	29	30	31		

JULY 1980

S	M	T	W	Th	F	S
	1	2	3	4	5	6
7	$\boxed{8}$	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	㉖	27
28	29	30	31			

FEBRUARY 1981

S	M	T	W	Th	F	S
				①	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	$\boxed{28}$	29	30	

☐ ______________ ☐ ______________ ☐ ______________ ☐ ______________ 147

○ ______________ ○ ______________ ○ ______________ ○ ______________ 202

MS-13

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Equivalent Values-Calendar

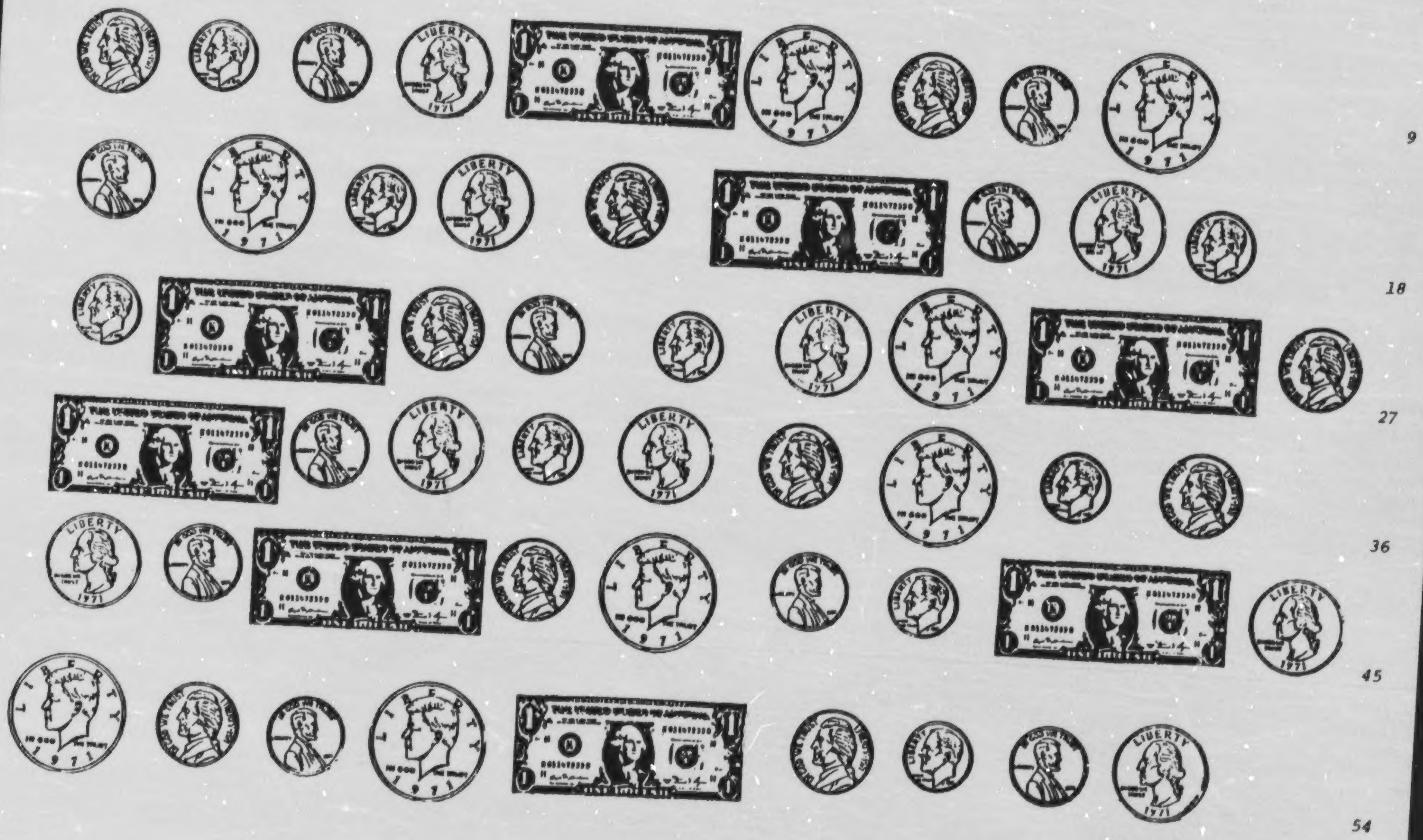
4 wks. = ___ mo.	1 yr. = ___ wks.	52 wks. = ___ yr.	1 yr. = ___ mos.	6
4 seasons = ___ yr.	1 mo. = ___ days	1 wk. = ___ days	1 yr. = ___ days	12
30 days = ___ mo.	12 mos. = ___ yr.	1 yr. = ___ seasons	1 mo. = ___ wks.	16
365 days = ___ yr.	7 days = ___ wk.	30 days = ___ mo.	12 mos. = ___ yr.	20
1 mo. = ___ wks.	365 days = ___ yr.	4 wks. = ___ mo.	1 yr. = ___ mos.	25
1 yr. = ___ wks.	1 yr. = ___ days	1 yr. = ___ seasons	4 seasons = ___ yr.	32
52 wks. = ___ yr.	7 days = ___ wk.	1 mo. = ___ days	1 wk. = ___ days	37
1 mo. = ___ wks.	4 seasons = ___ yr.	7 days = ___ wk.	1 yr. = ___ days	43
1 yr. = ___ seasons	1 yr. = ___ mos.	4 wks. = ___ mo.	1 mo. = ___ days	49
12 mos. = ___ yr.	365 days = ___ yr.	52 wks. = ___ yr.	30 days = ___ mo.	53
1 yr. = ___ wks.	1 wk. = ___ days	52 wks = ___ yr.	4 wks. = ___ mo.	58
1 wk. = ___ days	12 mos. = ___ yr.	365 days = ___ yr.	1 mo. = ___ wks.	62
30 days = ___ mo.	4 seasons = ___ yr.	7 days = ___ wk.	1 yr. = ___ days	68

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

MS-14
Coins 1¢ to $1.00

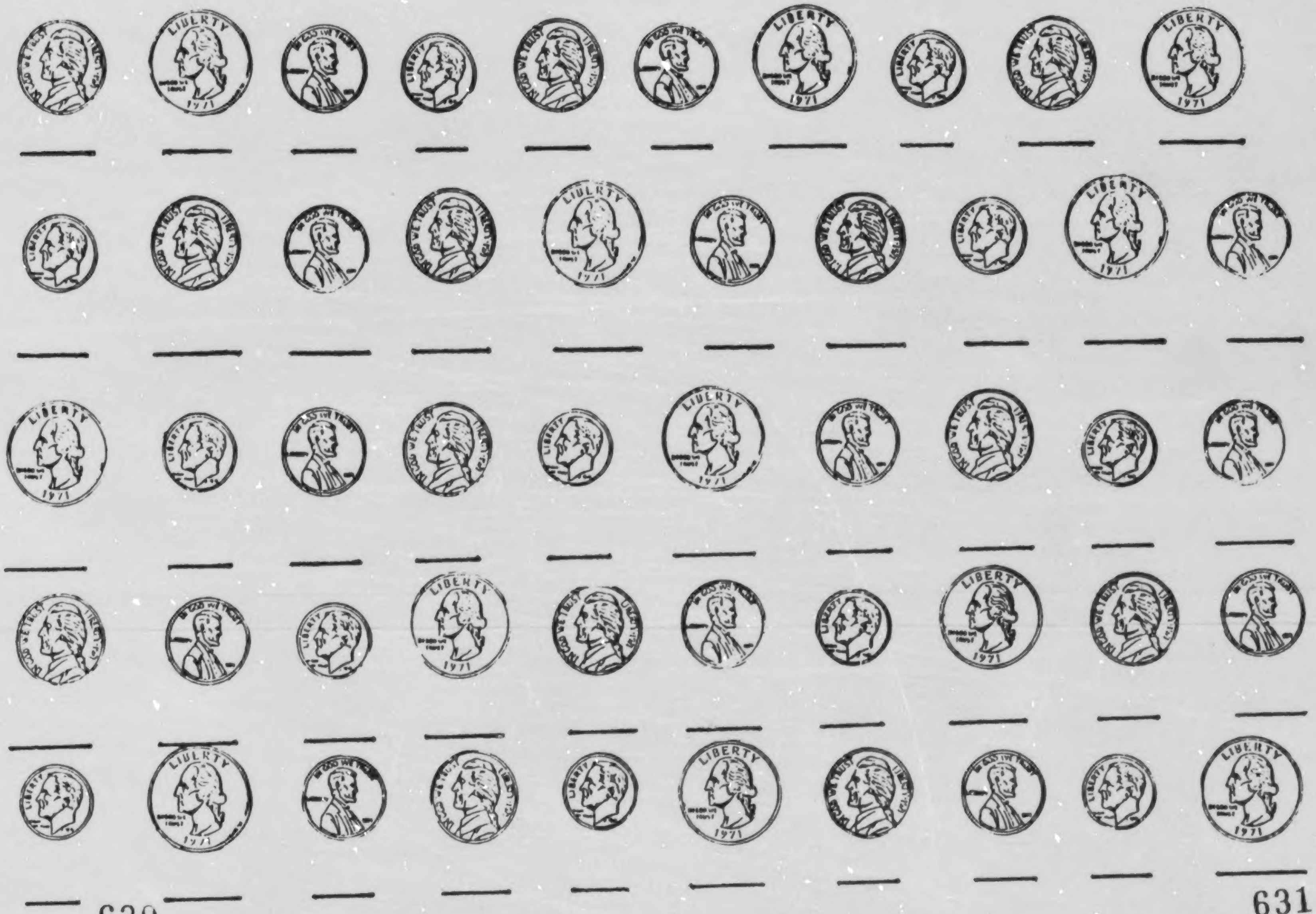

9
18
27
36
45
54

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say
see-write

MS-15 & 16
Coins 1¢ to 25¢

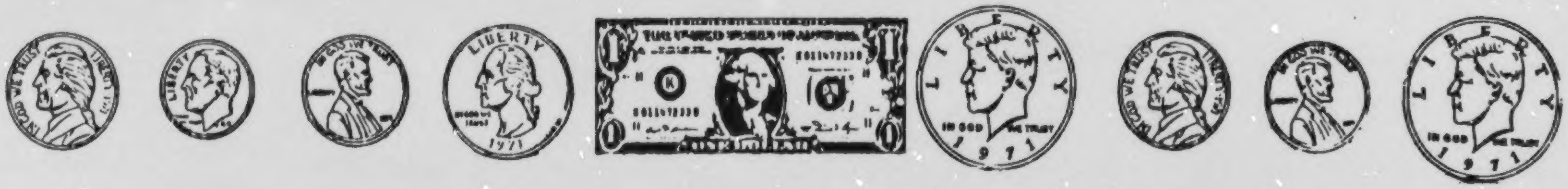

LIBERTY
IN GOD WE TRUST
1971

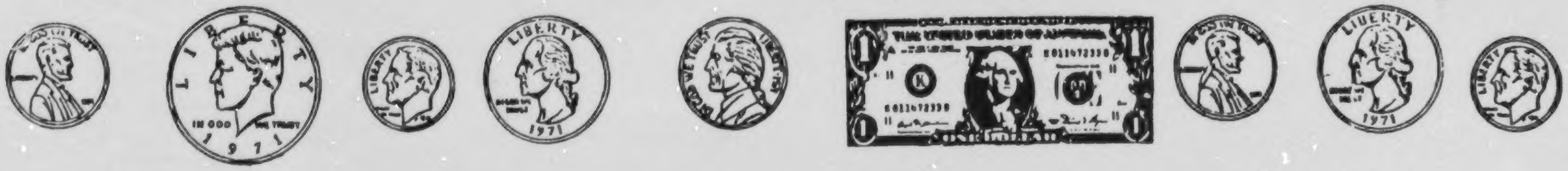
OCPS

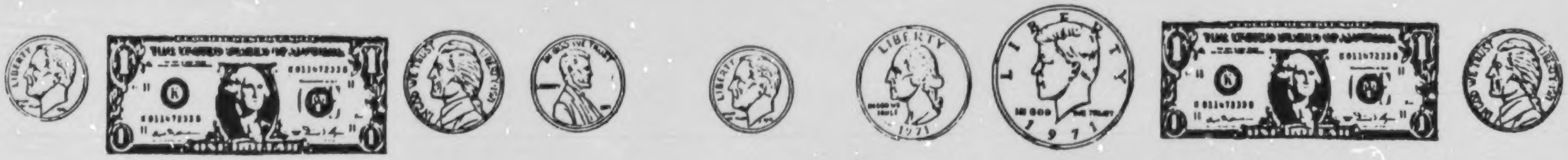
ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

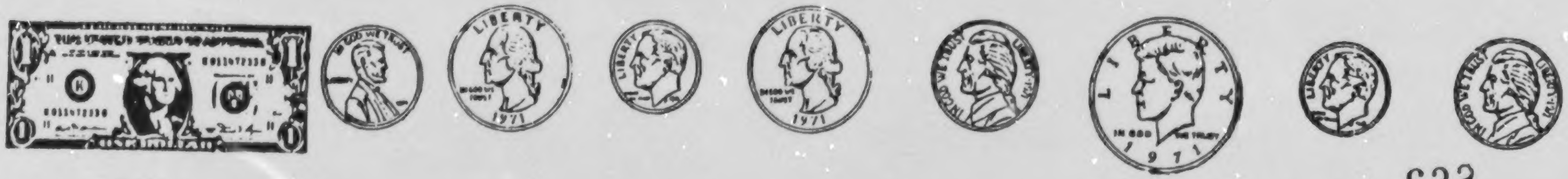
see-say
see-write

MS-17 & 18
Coins 1¢ to $1.00







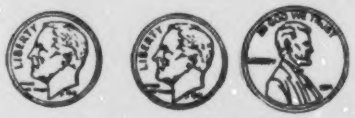
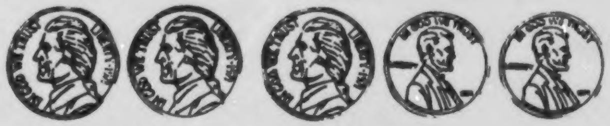
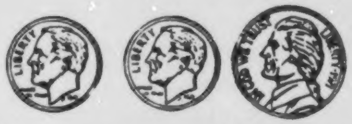
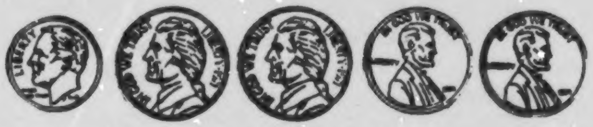
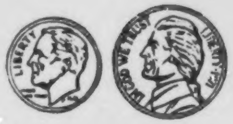
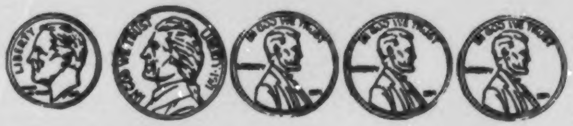
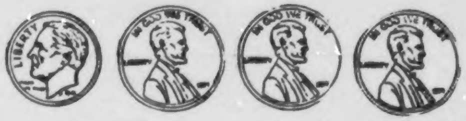
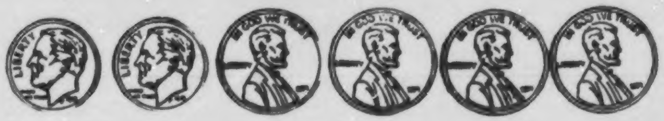
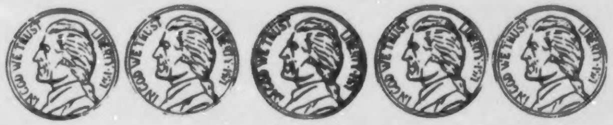
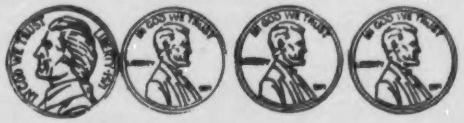


OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-19
(count to 25 cents)

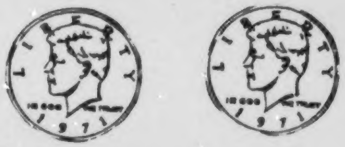
		6
		12
		18
		24
		29

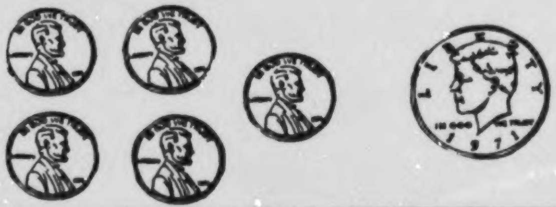
OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-20
(Count to $1.00)





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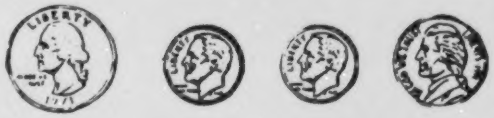

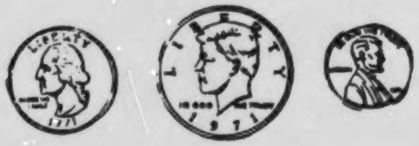

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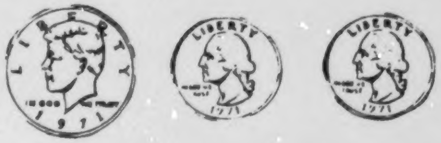

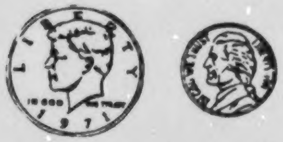

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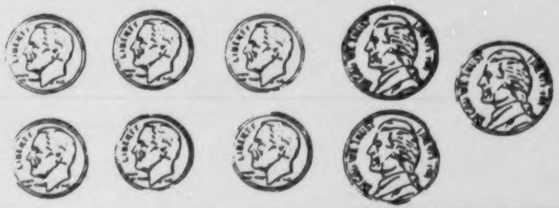

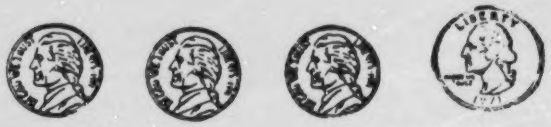

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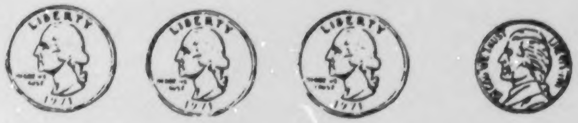
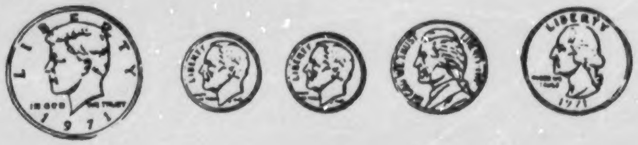




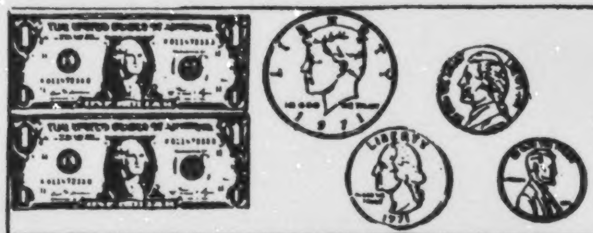
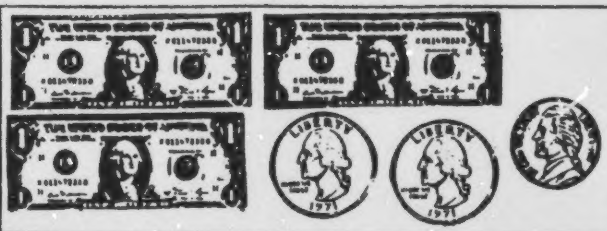
32

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-21
(Count to $5.00)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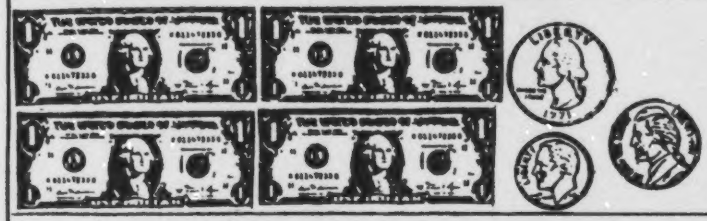
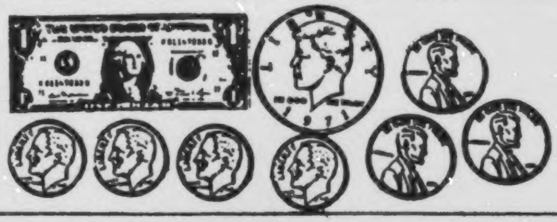
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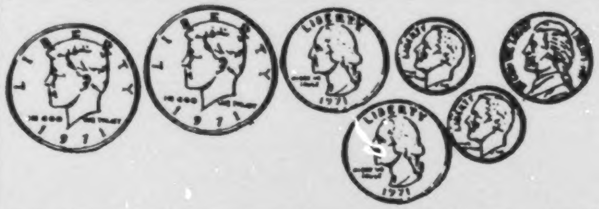
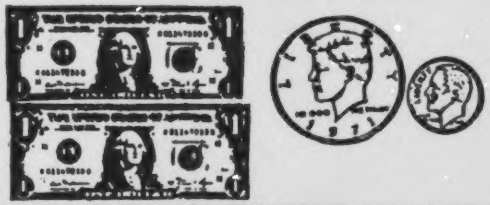
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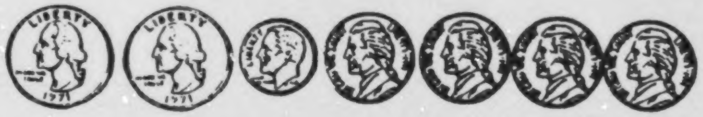
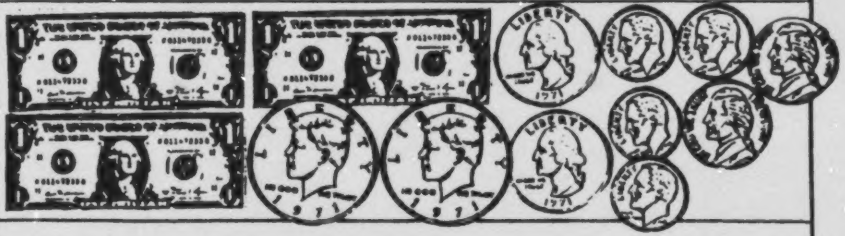
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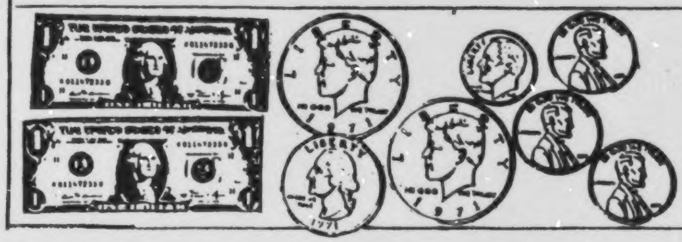
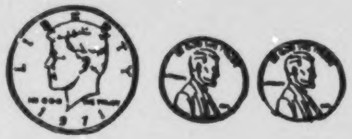


38

MS-22

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Add, Subtract w/ $
(No reg. & reg.)

$ 6.42 + 1.23	$ 2.48 + 1.86	$ 8.31 - 2.15	$ 6.65 + 2.02	$ 4.72 - 1.31	$ 2.25 + 1.02	18
$ 3.47 - 1.62	$ 9.49 - 8.49	$ 6.48 + 1.24	$ 3.67 - 1.40	$ 8.31 + 1.42	$ 8.49 - 2.17	36
$ 2.70 - 1.60	$ 2.36 - 1.19	$ 8.46 + 1.02	$ 8.04 - 2.36	$ 6.55 + 1.44	$ 8.59 + 2.63	55
$ 3.71 - 1.40	$ 9.07 + 2.96	$ 6.49 - 3.70	$ 4.20 + 1.68	$ 3.73 + 1.76	$ 3.32 - 1.17	74
$ 6.64 + 2.02	$ 6.42 - 1.33	$ 2.63 + 8.42	$ 6.26 - 4.22	$ 3.31 + 6.22	$ 6.27 - 1.48	93

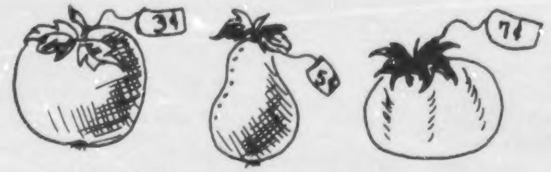
OC PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

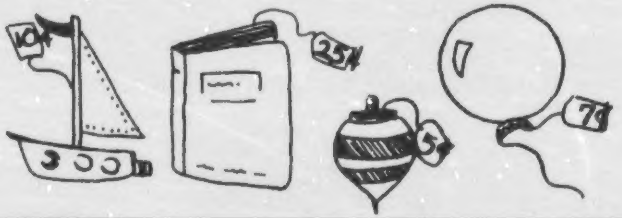
MS-23

Change from $1.00*

Write the change from $1.00 for each set of items.



______



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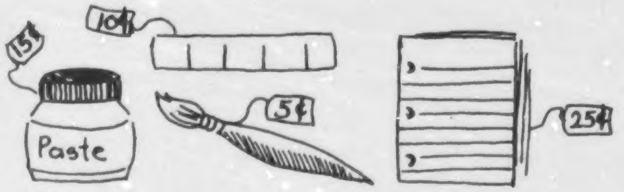
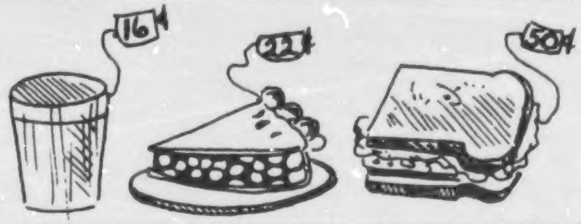

15¢
10¢
Paste
5¢
25¢

______



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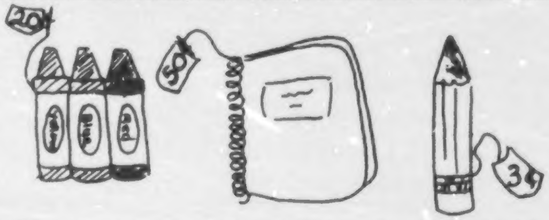

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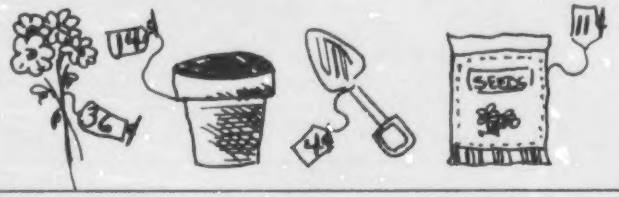
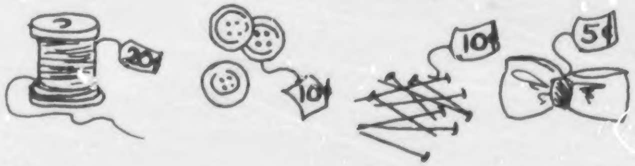
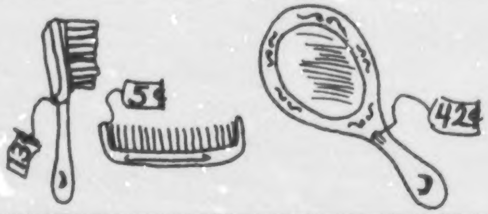

14¢
36¢
4¢
SEEDS
11¢

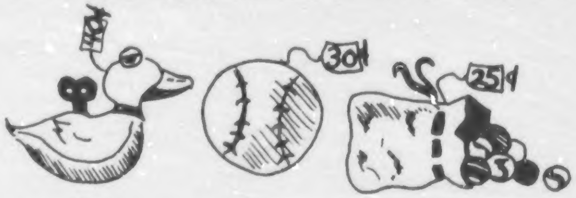
______



______



______



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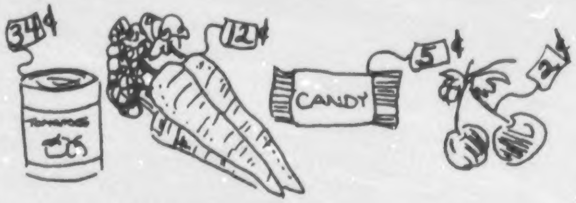
34¢
12¢
CANDY
5¢
2¢

______

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-24
Equiv. Values-Linear

1 mi. = ___ ft. 1 yd. = ___ ins. 1 ft. = ___ ins. 1 yd. = ___ ft. 9

5280 ft. = ___ mi. 36 ins. = ___ yd. 3 ft. = ___ yd. 12 ins. = ___ ft. 13

12 ins. = ___ ft. 1 ft. = ___ ins. 1 yd. = ___ ins. 1 mi. = ___ ft. 22

5280 ft. = ___ mi. 1 yd. = ___ ft. 36 ins. = ___ yd. 3 ft. = ___ yd. 26

12 ins. = ___ ft. 1 ft. = ___ ins. 5280 ft. = ___ mi. 36 ins. = ___ yd. 31

1 yd. = ___ ins. 1 mi. = ___ ft. 3 ft. = ___ yd. 1 yd. = ___ ft. 39

5280 ft. = ___ mi. 1 yd. = ___ ft. 1 ft. = ___ ins. 3 ft. = ___ yd. 44

12 ins. = ___ ft. 1 yd. = ___ ins. 1 mi. = ___ ft. 36 ins. = ___ yd. 52

1 ft. = ___ ins. 5280 ft. = ___ mi. 12 ins. = ___ ft. 1 yd. = ___ ins. 58

36 ins. = ___ yd. 3 ft. = ___ yd. 1 yd. = ___ ft. 1 mi. = ___ ft. 65

5280 ft. = ___ mi. 36 ins. = ___ yd. 12 ins. = ___ ft. 1 ft. = ___ ins. 70

1 yd. = ___ ins. 1 yd. = ___ ft. 3 ft. = ___ yd. 1 mi. = ___ ft. 78

12 ins. = ___ ft. 1 ft. = ___ ins. 36 ins. = ___ yd. 1 yd. = ___ ft. 83

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-25
Equiv. Values-Liquid

1 qt. = ___ pts.   8 pts. = ___ gal.   8 oz. = ___ cup   1 lb. = ___ oz.   5

16 oz. = ___ lb.   1 gal. = ___ pts.   2 pts. = ___ qt.   4 qts. = ___ gal.   9

1 cup = ___ oz.   1 ton = ___ lbs.   1 gal. = ___ qts.   1 gal. = ___ qts.   16

4 qts. = ___ gal.   1 ton = ___ lbs.   1 qt. = ___ pts.   16 oz. = ___ lb.   20

2 pts. = ___ qt.   8 pts. = ___ gal.   1 gal. = ___ pts.   1 lb. = ___ oz.   25

1 cup = ___ oz.   8 oz. = ___ cup   8 pts. = ___ gal.   1 qt. = ___ pts.   30

1 lb. = ___ oz.   1 gal. = ___ pts.   1 gal. = ___ qts.   8 oz. = ___ cup   37

4 qts. = ___ gal.   1 ton = ___ lbs.   2 pts. = ___ qt.   1 cup = ___ oz.   45

16 oz. = ___ lb.   1 ton = ___ lbs.   4 qts. = ___ gal.   2 pts. = ___ qt.   50

1 cup = ___ oz.   16 oz. = ___ lb.   8 pts. = ___ gal.   1 qt. = ___ pts.   55

1 gal. = ___ pts.   1 lb. = ___ oz.   8 oz. = ___ cup   1 gal. = ___ qts.   59

1 lb. = ___ oz.   1 cup = ___ oz.   8 pts. = ___ gal.   2 pts. = ___ qt.   64

1 qt. = ___ pts.   8 oz. = ___ cup   1 ton = ___ lbs.   1 gal. = ___ qts.   71

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

MS-26
Metric Words

hectoliter	gram	millimeter	deciliter	decigram	centiliter	kiloliter	7
meter	kilogram	kilometer	milligram	centigram	milliliter	hectogram	14
centimeter	hectometer	liter	dekameter	decimeter	dekaliter	dekagram	21
liter	milliliter	meter	centiliter	hectoliter	hectogram	kiloliter	28
kilogram	gram	dekaliter	millimeter	centigram	deciliter	kilometer	35
dekameter	milligram	decimeter	hectometer	decigram	centimeter	millimeter	42
centimeter	deciliter	decimeter	hectogram	kilogram	centiliter	dekagram	49
milliliter	dekaliter	milligram	kiloliter	liter	hectoliter	decigram	56
gram	meter	hectometer	dekameter	kilometer	centigram	decimeter	63
gram	centigram	kilogram	decigram	hectometer	hectogram	meter	70
hectoliter	deciliter	dekagram	dekaliter	centimeter	dekameter	milligram	77
centiliter	milliliter	kiloliter	millimeter	kilometer	liter	kiloliter	84
millimeter	kilometer	liter	dekaliter	deciliter	milliliter	meter	91

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PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

MS-26a

Metric Words-Linear

meter	centimeter	milliliter	dekameter	kilometer	hectometer	decimeter	7
dekameter	kilometer	centimeter	meter	decimeter	dekameter	milliliter	14
hectometer	centimeter	decimeter	kilometer	milliliter	meter	dekameter	21
hectometer	meter	milliliter	kilometer	decimeter	centimeter	milliliter	28
kilometer	hectometer	decimeter	dekameter	meter	hectometer	decimeter	35
meter	dekameter	kilometer	centimeter	decimeter	milliliter	dekameter	42
hectometer	kilometer	meter	milliliter	hectometer	kilometer	decimeter	49
dekameter	centimeter	hectometer	kilometer	decimeter	centimeter	dekameter	56
milliliter	decimeter	meter	centimeter	milliliter	decimeter	kilometer	63
dekameter	centimeter	hectometer	kilometer	decimeter	dekameter	hectometer	70
milliliter	decimeter	dekameter	dekameter	centimeter	meter	kilometer	77
meter	kilometer	kilometer	hectometer	milliliter	dekameter	decimeter	84
dekameter	hectometer	meter	decimeter	centimeter	milliliter	meter	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Metric Words-Volume

centiliter	deciliter	dekaliter	liter	milliliter	kiloliter	hectoliter	7
liter	centiliter	dekaliter	deciliter	kiloliter	milliliter	deciliter	14
milliliter	kiloliter	deciliter	liter	hectoliter	centiliter	dekaliter	21
centiliter	hectoliter	liter	dekaliter	milliliter	kiloliter	deciliter	28
hectoliter	dekaliter	centiliter	liter	deciliter	milliliter	kiloliter	35
centiliter	deciliter	kiloliter	hectoliter	liter	dekaliter	centiliter	42
liter	centiliter	hectoliter	dekaliter	deciliter	milliliter	kiloliter	49
hectoliter	deciliter	liter	milliliter	centiliter	dekaliter	deciliter	56
centiliter	kiloliter	deciliter	hectoliter	dekaliter	centiliter	liter	63
dekaliter	liter	centiliter	dekaliter	hectoliter	deciliter	milliliter	70
kiloliter	deciliter	dekaliter	hectoliter	liter	kiloliter	milliliter	77
liter	milliliter	centiliter	liter	kiloliter	centiliter	deciliter	84
kiloliter	liter	deciliter	milliliter	centiliter	hectoliter	dekaliter	91

MS-26c

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Metric Words-Mass

milligram	decigram	centigram	dekagram	kilogram	gram	hectogram	7
hectogram	milligram	dekagram	decigram	gram	kilogram	gram	14
dekagram	centigram	milligram	hectogram	kilogram	dekagram	decigram	21
milligram	gram	centigram	dekagram	hectogram	milligram	gram	28
kilogram	dekagram	hectogram	gram	decigram	dekagram	milligram	35
milligram	centigram	kilogram	hectogram	gram	decigram	dekagram	42
centigram	dekagram	hectogram	gram	milligram	dekagram	centigram	49
kilogram	gram	dekagram	decigram	hectogram	milligram	dekagram	56
milligram	decigram	centigram	kilogram	gram	dekagram	hectogram	63
dekagram	milligram	dekagram	decigram	kilogram	gram	decigram	70
gram	decigram	milligram	kilogram	dekagram	hectogram	kilogram	77
dekagram	centigram	gram	milligram	hectogram	decigram	kilogram	84
decigram	gram	milligram	hectogram	kilogram	centigram	dekagram	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-27

Metric Word to Metric Unit
(linear, volume, mass)

Write l, v, or m for each word:

hectoliter	gram	millimeter	deciliter	decigram	centiliter	kiloliter	meter	8
kilogram	kilometer	milligram	centigram	milliliter	hectogram	centimeter	hectometer	16
liter	dekameter	decimeter	dekaliter	dekagram	milliliter	liter	dekagram	24
meter	centiliter	hectoliter	hectogram	kiloliter	kilogram	gram	dekaliter	32
millimeter	centigram	deciliter	kilometer	dekameter	milligram	decimeter	hectometer	40
decigram	centimeter	millimeter	deciliter	decimeter	hectogram	kilogram	centiliter	48
liter	hectoliter	decigram	gram	meter	hectometer	dekameter	kilometer	56
gram	centigram	kilogram	decigram	hectometer	meter	hectogram	deciliter	64

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

MS-28

Metric Symbols
(linear, volume, mass)

Write metric symbol for each word:

milliliter	hectometer	centiliter	deciliter	centigram	dekaliter	millimeter	dekameter	8
hectoliter	gram	centimeter	kiloliter	dekagram	decigram	milligram	hectogram	16
meter	decimeter	kilometer	kilogram	liter	hectometer	deciliter	dekagram	24
kilogram	meter	decimeter	hectoliter	dekaliter	centimeter	millimeter	gram	32
hectogram	kiloliter	decigram	kilometer	milligram	liter	milliliter	dekameter	40
centiliter	centigram	meter	hectometer	centimeter	kilometer	milligram	kilogram	48
liter	centiliter	dekameter	centigram	hectogram	hectoliter	gram	dekaliter	56
millimeter	decigram	deciliter	decimeter	dekagram	milliliter	kiloliter	meter	64

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see-write

MS-28a

Metric Symbol-Linear

Write metric symbol for each word:

hectometer	centimeter	decimeter	millimeter	dekameter	kilometer	meter	dekameter	8
decimeter	hectometer	millimeter	kilometer	centimeter	meter	hectometer	decimeter	16
millimeter	dekameter	kilometer	centimeter	meter	decimeter	millimeter	kilometer	24
dekameter	centimeter	hectometer	meter	hectometer	centimeter	meter	decimeter	32
kilometer	millimeter	dekameter	decimeter	hectometer	kilometer	centimeter	dekameter	40
meter	kilometer	millimeter	centimeter	dekameter	meter	millimeter	hectometer	48
decimeter	millimeter	meter	dekameter	centimeter	decimeter	kilometer	meter	56
centimeter	kilometer	hectometer	millimeter	decimeter	meter	millimeter	centimeter	64

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see-write

MS-28b
Metric Symbol-Volume

Write the metric symbol for each word:

centiliter	liter	kiloliter	deciliter	dekaliter	milliliter	hectoliter	milliliter
deciliter	kiloliter	liter	hectoliter	dekaliter	centiliter	dekaliter	hectoliter
kiloliter	centiliter	deciliter	liter	milliliter	dekaliter	liter	deciliter
centiliter	milliliter	kiloliter	hectoliter	dekaliter	hectoliter	deciliter	centiliter
liter	kiloliter	milliliter	dekaliterr	hectoliter	deciliter	milliliter	deciliter
kiloliter	liter	deciliter	hectoliter	dekaliter	milliliter	liter	centiliter
hectoliter	centiliter	milliliter	liter	kiloliter	dekaliter	milliliter	deciliter
milliliter	liter	hectoliter	dekaliter	kiloliter	deciliter	centiliter	liter

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see-write

MS-28c
Metric Symbol-Mass

Write the metric symbol for each word:

gram	decigram	hectogram	milligram	kilogram	centigram	dekagram	gram
kilogram	centigram	decigram	hectogram	centigram	dekagram	milligram	hectogram
gram	kilogram	milligram	decigram	dekagram	gram	dekagram	milligram
decigram	hectogram	kilogram	centigram	milligram	decigram	hectogram	centigram
dekagram	gram	decigram	kilogram	centigram	dekagram	milligram	hectogram
gram	hectogram	kilogram	dekagram	milligram	centigram	kilogram	decigram
milligram	decigram	gram	kilogram	dekagram	decigram	gram	kilogram
gram	hectogram	milligram	decigram	dekagram	hectogram	centigram	milligram

MS-29

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see-write

Metric Term to Metric Value

Write the value for each term:

meter	gram	kilo	hecto	liter	centi	deci	milli
deka	hecto	liter	meter	centi	gram	milli	deci
kilo	deka	deci	gram	deka	meter	centi	deci
deka	gram	hecto	deka	deci	kilo	liter	milli
gram	hecto	kilo	deci	liter	deka	kilo	deci
liter	centi	deka	gram	milli	liter	hecto	deka
hecto	gram	deci	liter	deka	centi	milli	kilo
deka	centi	gram	meter	deci	deka	liter	milli

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see-write

MS-30
Metric Value to Metric Prefix

Write the metric prefix for each value:

100	1000	1/100	10	1/1000	10	1/10	1/100
1000	1/100	100	1/1000	100	1/100	1000	1/1000
10	1/10	100	1/10	1000	1/1000	1/100	10
100	1000	10	1/100	1/1000	1/100	1/1000	10
1/10	1000	1/100	10	100	1/10	1/100	10
100	1/10	100	1/1000	1000	1/100	10	1/10
1/10	100	1/100	1/10	1/1000	100	1/10	1/1000
1000	1/10	10	100	1/100	1/1000	100	10

Children Learn What They Live

If a child lives with criticism,
He learns to condemn.
If a child lives with hostility,
He learns to fight.
If a child lives with ridicule,
He learns to be shy.
If a child lives with shame,
He learns to feel guilty.
If a child lives with tolerance,
He learns to be patient.
If a child lives with encouragement,
He learns confidence.
If a child lives with fairness,
He learns justice.
If a child lives with security,
He learns to have faith.
If a child lives with approval,
He learns to like himself.
If a child lives with acceptance
and friendship,
He learns to find love in the world.

Dorothy Law Holte

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TODAY THINGS TO DO

Date ____________ Done

1 ____________________ ☐

2 ____________________ ☐

3 ____________________ ☐

4 ____________________ ☐

5 ____________________ ☐

6 ____________________ ☐

7 ____________________ ☐

8 ____________________ ☐

9 ____________________ ☐

10 ____________________ ☐

11 ____________________ ☐

12 ____________________ ☐

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EC

A RESOURCE MANUAL FOR THE DEVELOPMENT AND EVALUATION OF SPECIAL PROGRAMS FOR EXCEPTIONAL STUDENTS

VOLUME V-D:

Techniques of Precision Teaching

Part 3: Reading Basic Skills Curriculum

Bureau of Education for Exceptional Students

State of Florida
Department of Education
Tallahassee, Florida
Ralph D. Turlington, Commissioner
Affirmative action/equal opportunity employer

June 1983

672

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Department of State
1983

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INTRODUCTION

The following Reading basic skills curriculum was developed as a guideline for use in the Specific Learning Disabilities, Educable Mentally Handicapped and Emotionally Handicapped Programs. It is based on selected skills from commonly used materials for reading and includes most Florida State Assessment Skills.

For organizational purposes, academic skills within the content areas have been arranged in strands. The reading strands include Reading Readiness, Phonetic Analysis, Structural Analysis, Vocabulary Development, Comprehension and Study Skills.

The curriculum was written in Precision Teaching terminology in order to help teachers pinpoint specific skill deficits, identify intake-output channels and make each skill measurable.

The skills within each strand are arranged in sequential order with Mastery Skills listed first and component skills indented under each Mastery Skill.

Example: Phonetic Analysis
- See-say consonant and vowel sounds
    - See-say vowel sounds
    - See-say consonant sounds
- See-say CVC & CVCE words
    - See-say CVCE words
    - See-say CVC words

The skills underlined at the end of each strand are called Mixed Mastery Skills and are a compilation of all the skills in one strand or several strands. This skill provides a more complete measure of a student's learning through the use of discrimination of mixed skills.

Since it is difficult to rank all skills in a strand, it is not necessary to teach each skill in any sequential order. Teachers are encouraged to utilize those skills which are important to individual student learning.

Specific practice sheets have been designed to measure most skills located in each strand along with the Mixed Mastery practice sheet used to measure competency of that entire strand. The Mixed Mastery sheet can also be used for initial assessment and maintenance skill measurement. Some strands contain too many isolated skills to develop a Mixed Mastery practice sheet. Teachers may want to develop their own practice sheets using a few of the skills in that particular strand.

Many skills in the curriculum have additional practice sheets or "slice backs." These sheets are provided for those students who need smaller steps in the curriculum. For example, if a teacher has pinpointed the skill of See-Say CVC words for a student and there is no progress with that skill there are "sliced sheets" of CVC-a or CVC-i etc., available for the teacher to utilize. However, it is recommended to guide students through the curriculum in larger steps if possible.

Practice sheets are organized by strands from least to most difficult skills. A listing of all the practice sheets that are available for each strand comes with each set. Each practice sheet is correlated with skill levels and the notations in the upper right hand corner include the number of the sheet, a brief description of the skill and an asterisk (*) if it is a Florida State Assessment Skill.

After teachers use the curriculum to pinpoint the skills needed for individual students each listing will be helpful in locating the appropriate practice sheets.

READING READINESS

See-Say category pictures (vehicles, food, buildings, etc.)

See-Mark directional-positional pictures (concepts)

Hear-Say (echo) phrase

Hear-Do directions

See-Mark matching shapes and letters

See-Say rhyming pictures

Think-Say alphabet

See-Say upper and lower case letters
    See-Say upper case letters
    See-Say lower case letters

See-Mark upper case letter to matching lower case letter

Hear-Write upper or lower case letters

PHONETIC ANALYSIS

- See-Say consonant and vowel sounds
    - See-Say vowel sounds
    - See-Say consonant sounds

- See-Say CVC & CVCE words
    - See-Say CVCE words
    - See-Say CVC words

- See-Say blend and diagraph words
    - See-Say diagraph words
    - See-Say blend words

- See-Say vowel combination words
    - See-Say vowel + r words
    - See-Say irregular vowel combination words
    - See-Say regular vowel combination words

- See-Say hard & soft g and c words
    - See-Say hard & soft c words
    - See-Say hard & soft g words

See-Say Mastery Words

STRUCTURAL ANALYSIS

See-Say noun, verb, adjective form words *

- See-Say adjective form words
- See-Say verb form words
- See-Say noun form words

See-Say compound words *

See-Say prefix & suffix words *

- See-Say prefix words
- See-Say suffix words

See-Say prefix meanings*

See-Say suffix meanings*

See-Say contractions *

See-Mark syllables

See-Say Mastery Words

VOCABULARY DEVELOPMENT

See-Say Dolch stories K-3

    See-Say Dolch phrases K-3

    See-Say Dolch words K-3 *

See-Say common sign and label words

See-Say SSAT grade 3, 5 and 8 words *

See-Mark homonyms

See-Mark antonyms *

See-Mark synonyms *

COMPREHENSION

Current research has reflected the fact that difficulty in comprehension may be due in part to poor decoding skills. Interventions to improve the ability to decode in reading have resulted in simultaneous improvement in overall comprehension skills. (J. Samuels, 1979)

The method of repeated readings as a supplement in a developmental reading program has been shown to be a viable procedure for improving reading fluency and comprehension. (J. Samuels, The Reading Teacher 1979).

The method is very simple. The student reads a passage for one minute to a checker who records correct and incorrect responses. The passage is read each day until a proficiency level is reached by the student.

An added technique for improving comprehension is to ask the student to say or write all the ideas in one minute that he/she can remember from the passage read. Another variation is that the student can listen to the story being read and then say all the ideas he can remember.

STUDY SKILLS

See directions-Write response to complete task *

Hear directions-Write response to complete task *

See-Mark alphabetical order*

- See-Mark alphabetical order 3rd letter
- See-Mark alphabetical order 2nd letter *
- See-Mark alphabetical order 1st letter

See-Mark guide words

See-Mark story from table of contents *

- See-Mark story from table of contents page # *
- See-Mark story from table of contents category *

See-Mark information from index *

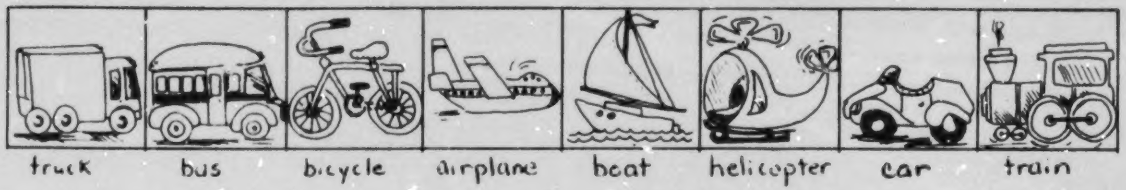
See-Mark information using map symbols *

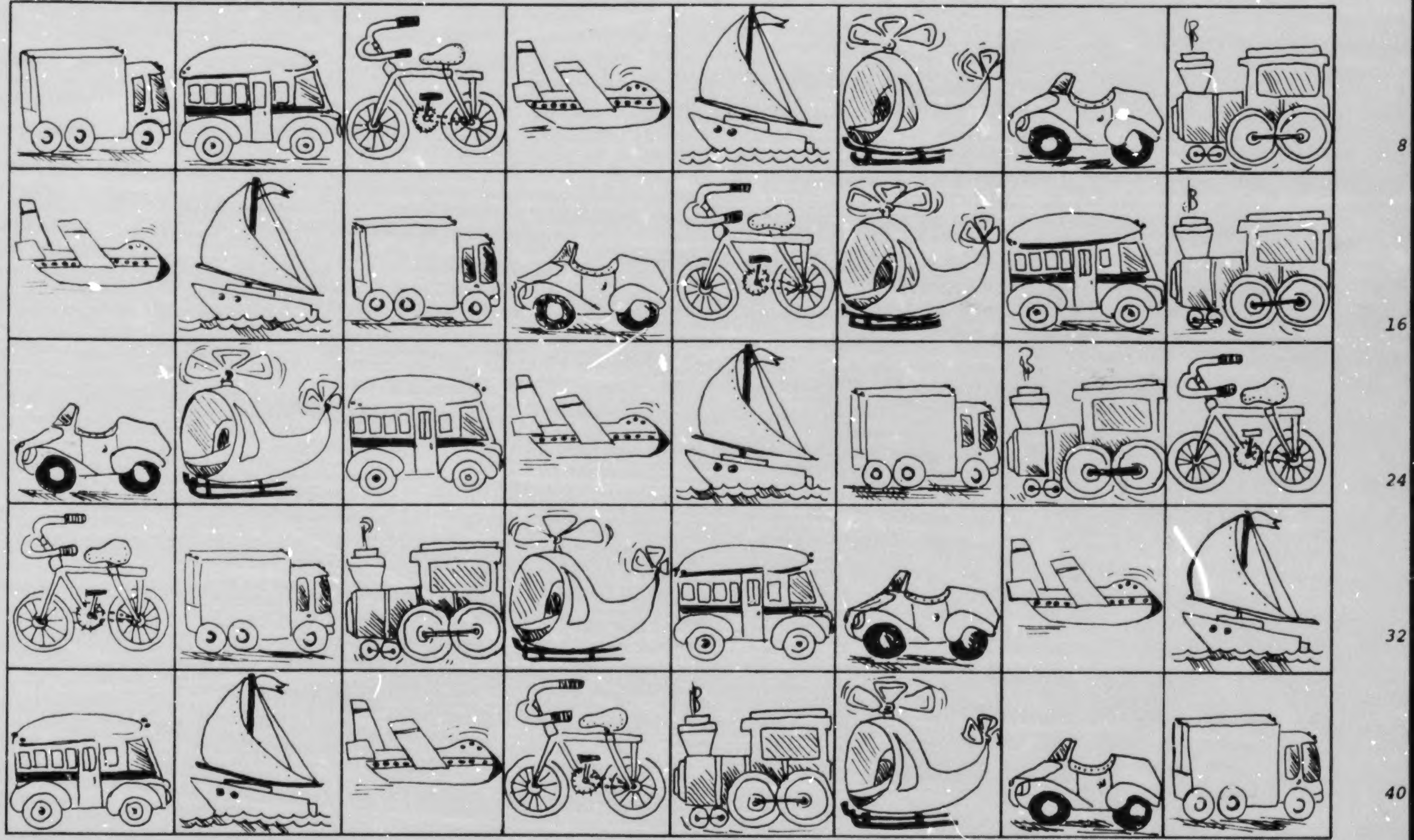
READING READINESS

RR-1	Category Pictures - vehicles
RR-2	Category Pictures - clothes
RR-3	Category Pictures - fruit
RR-4	Category Pictures - buildings
RR-5	Category Pictures - home
RR-6	Category Pictures - school
RR-7	Directional - Positional Concepts - in/out
RR-8	Directional - Positional Concepts - on/off
RR-9	Directional - Positional Concepts - left/right
RR-10	Directional - Positional Concepts - before/after
RR-11	Directional - Positional Concepts - big/little
RR-12	Directional - Positional Concepts - up/down
RR-13	Directional - Positional Concepts - above/below
RR-14	Directional - Positional Concepts - over/under
RR-15	Phrases
RR-16	Directions
RR-17	Matching Letters
RR-18	Matching Shapes
RR-19	Rhyming Pictures
RR-20	Alphabet Direction Sheet
RR-21	Lower case letters
RR-22	Upper case letters
RR-23	Upper case/lower case
RR-24	Matching Letters/Discrimination
RR-25	Writing letters Direction Sheet

Category Pictures
Vehicles

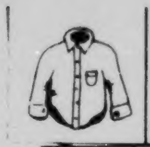
see-say

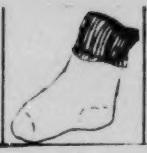

truck
bus
bicycle
airplane
boat
helicopter
car
train

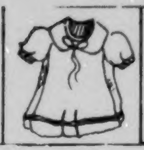


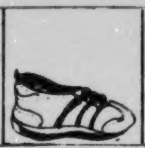
Category Pictures
Clothes

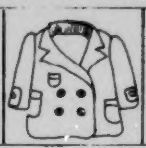
see - say

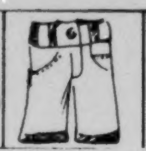

shirt

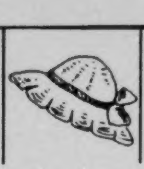

sock

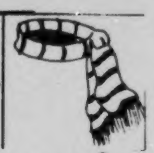

dress

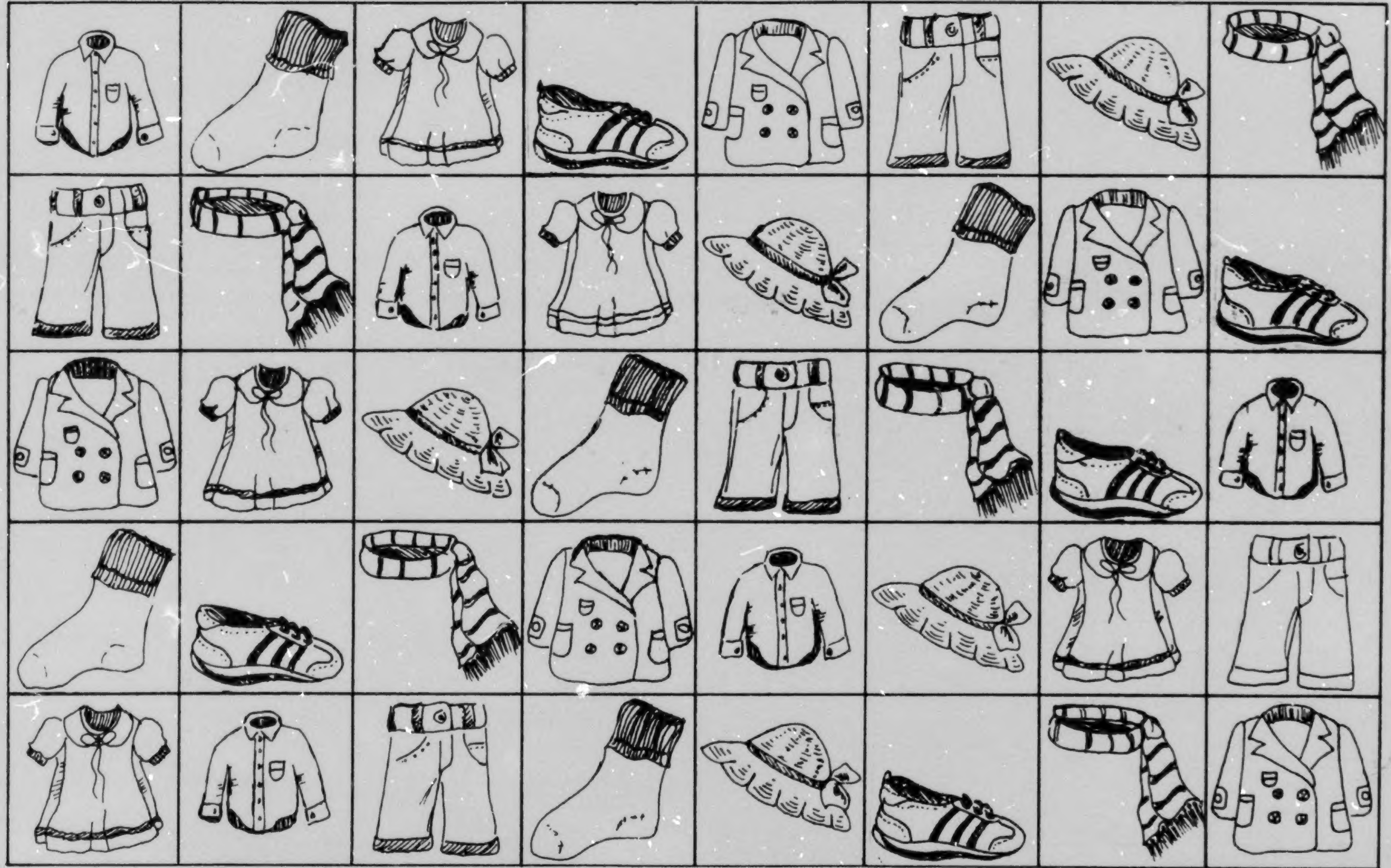

shoe


coat


pants

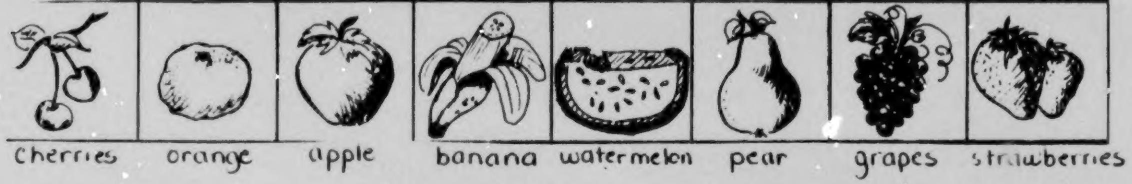

hat

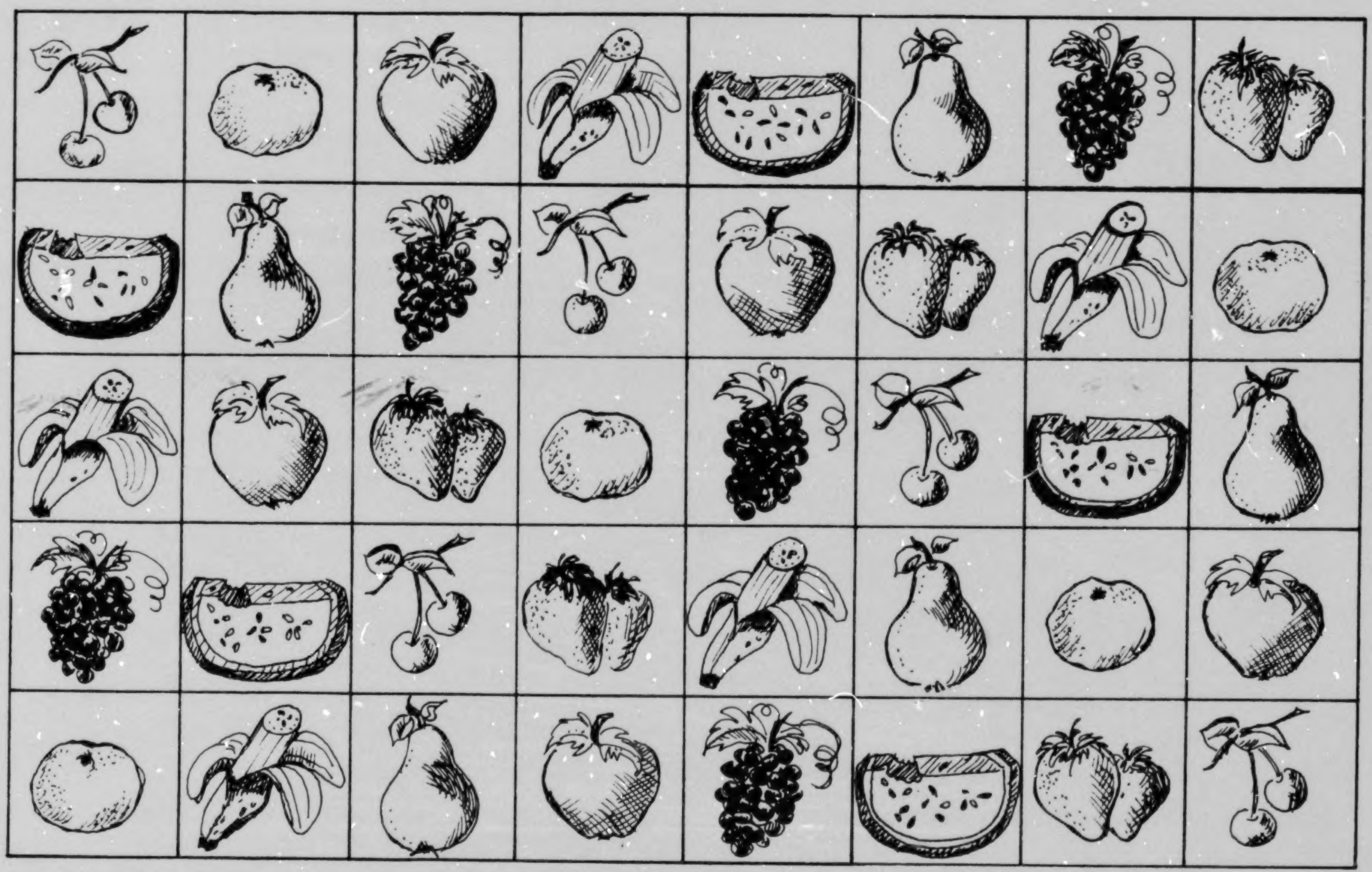

scarf



RR-3

Category Pictures
Fruit
see-say

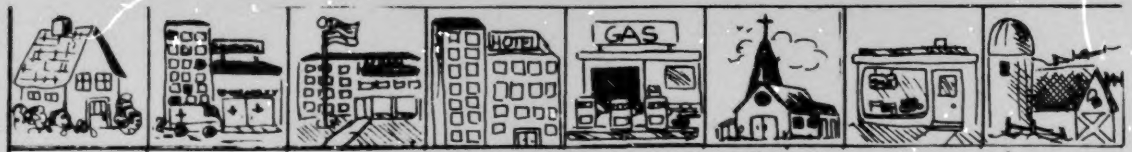

cherries
orange
apple
banana
watermelon
pear
grapes
strawberries

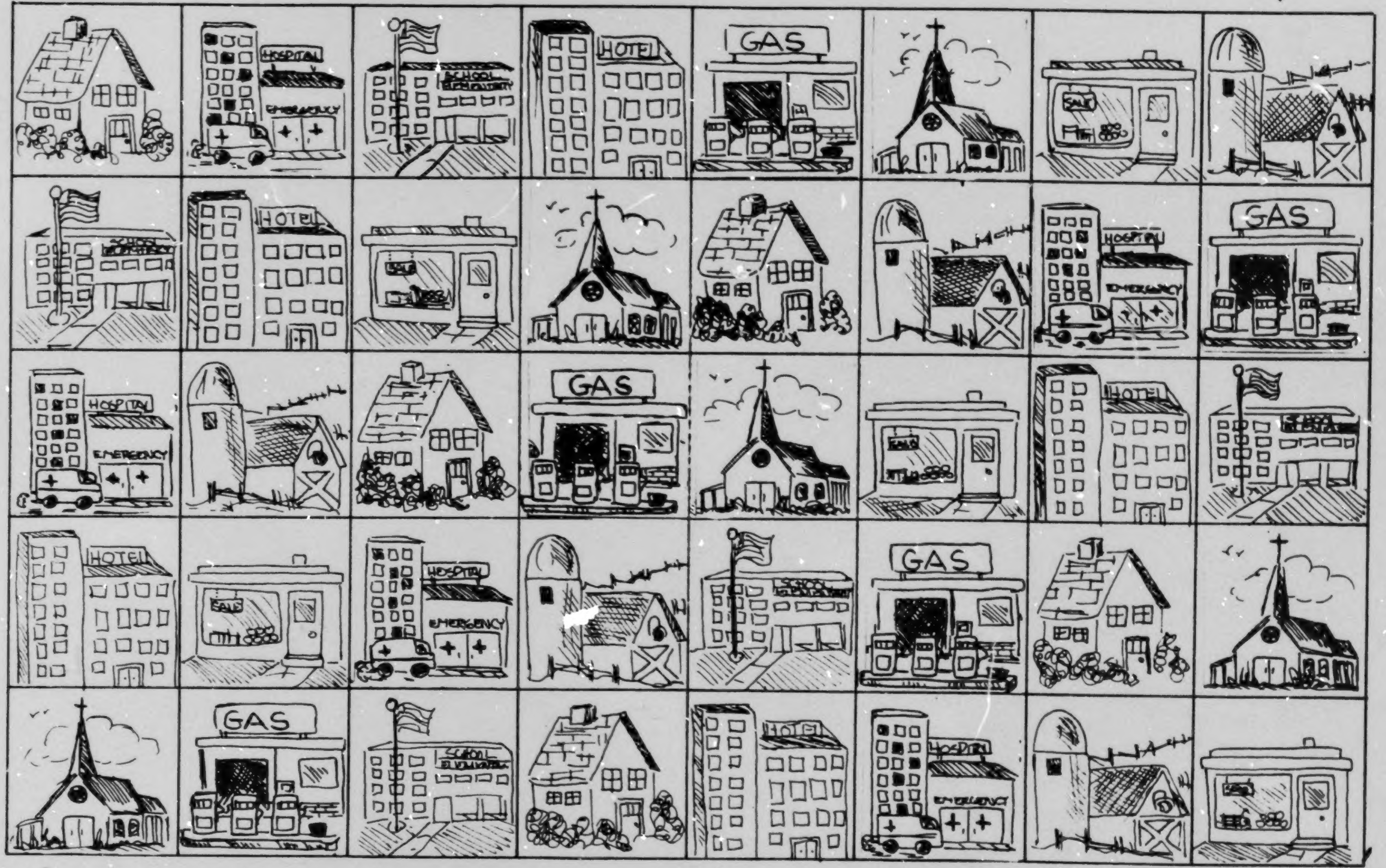


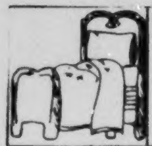
RR-4

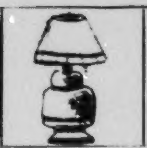
Category Pictures
Buildings

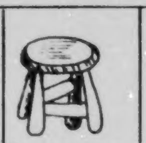
See-say

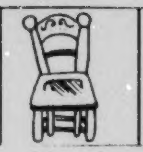

house
hospital
school
hotel
gas station
church
store
barn

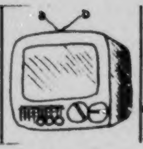

HOSPITAL
SCHOOL
HOTEL
GAS
SALE
EMERGENCY
8
16
24
32
40

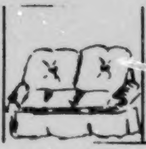

bed

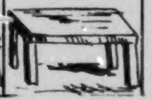

lamp


stool

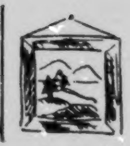

chair


television


couch

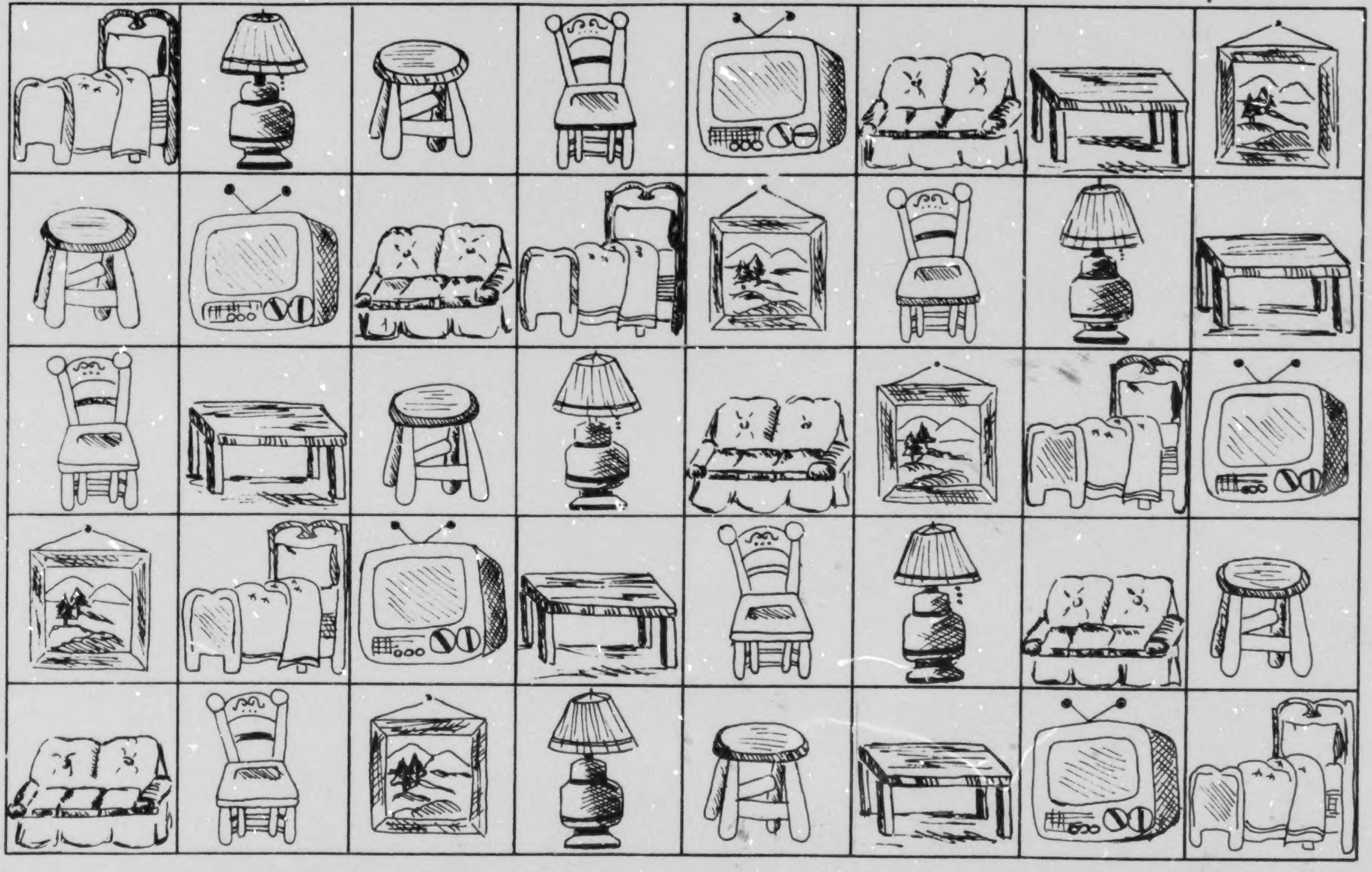


table


picture

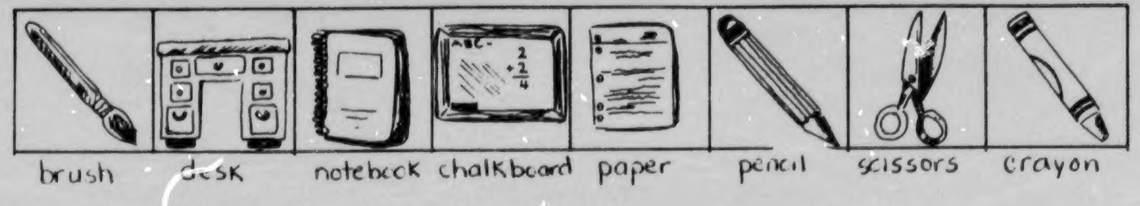
Category Pictures
At Home

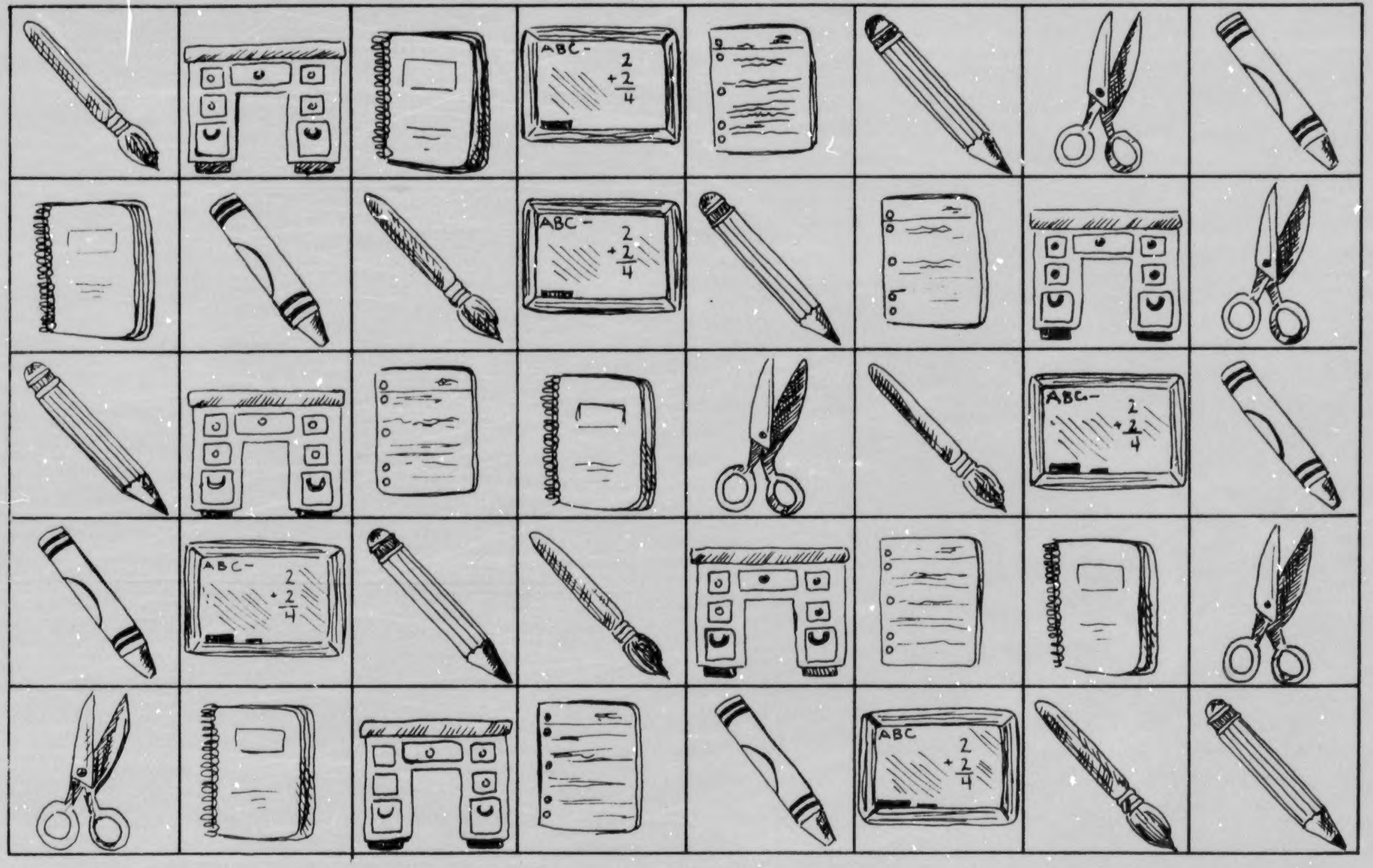
See- say



Category Pictures
At School

see-say


brush
desk
notebook
chalkboard
paper
pencil
scissors
crayon


ABC-
2
+2
4
8
16
24
32
40

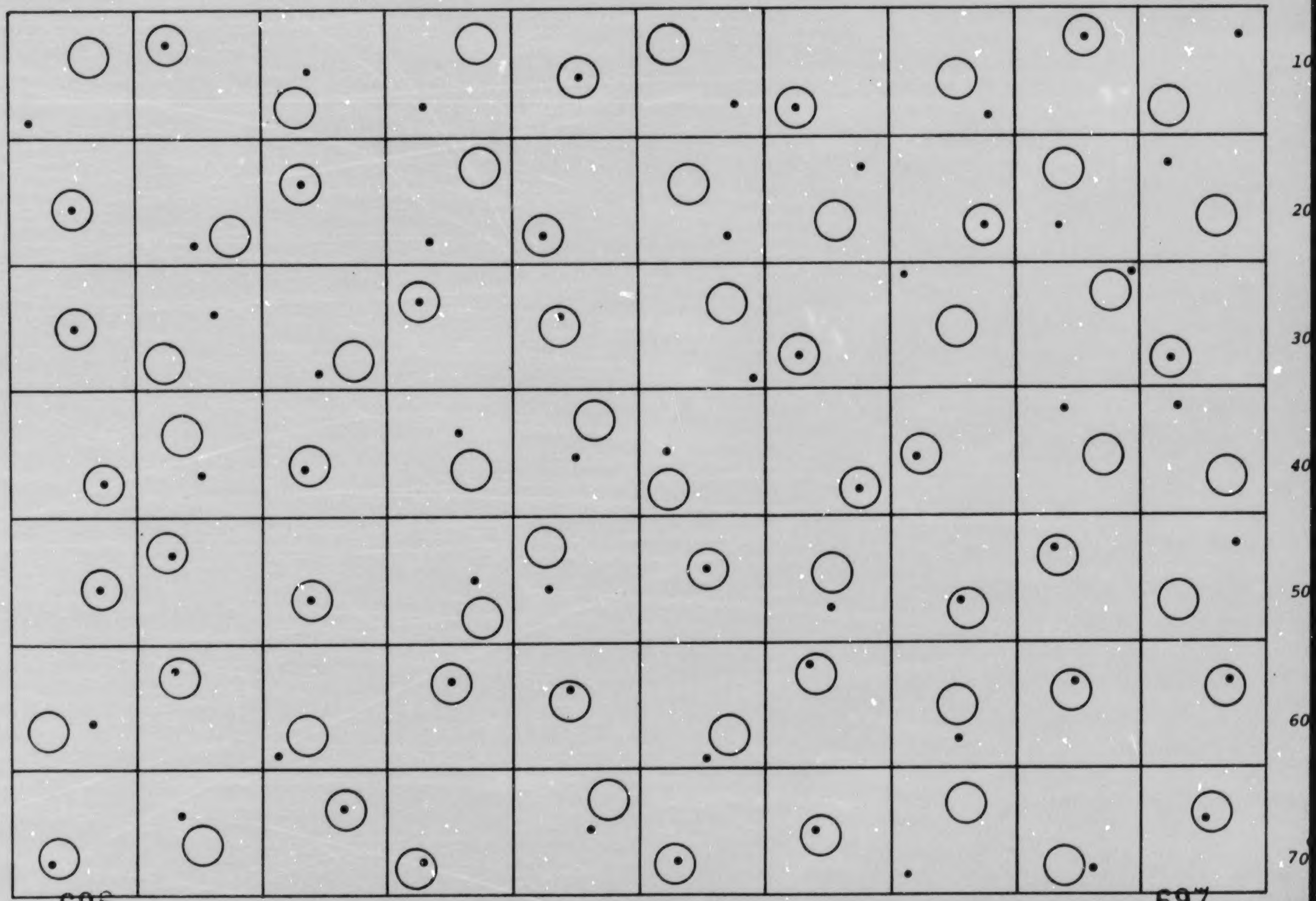
OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say
see-mark

RR-7

(In-Out)


10
20
30
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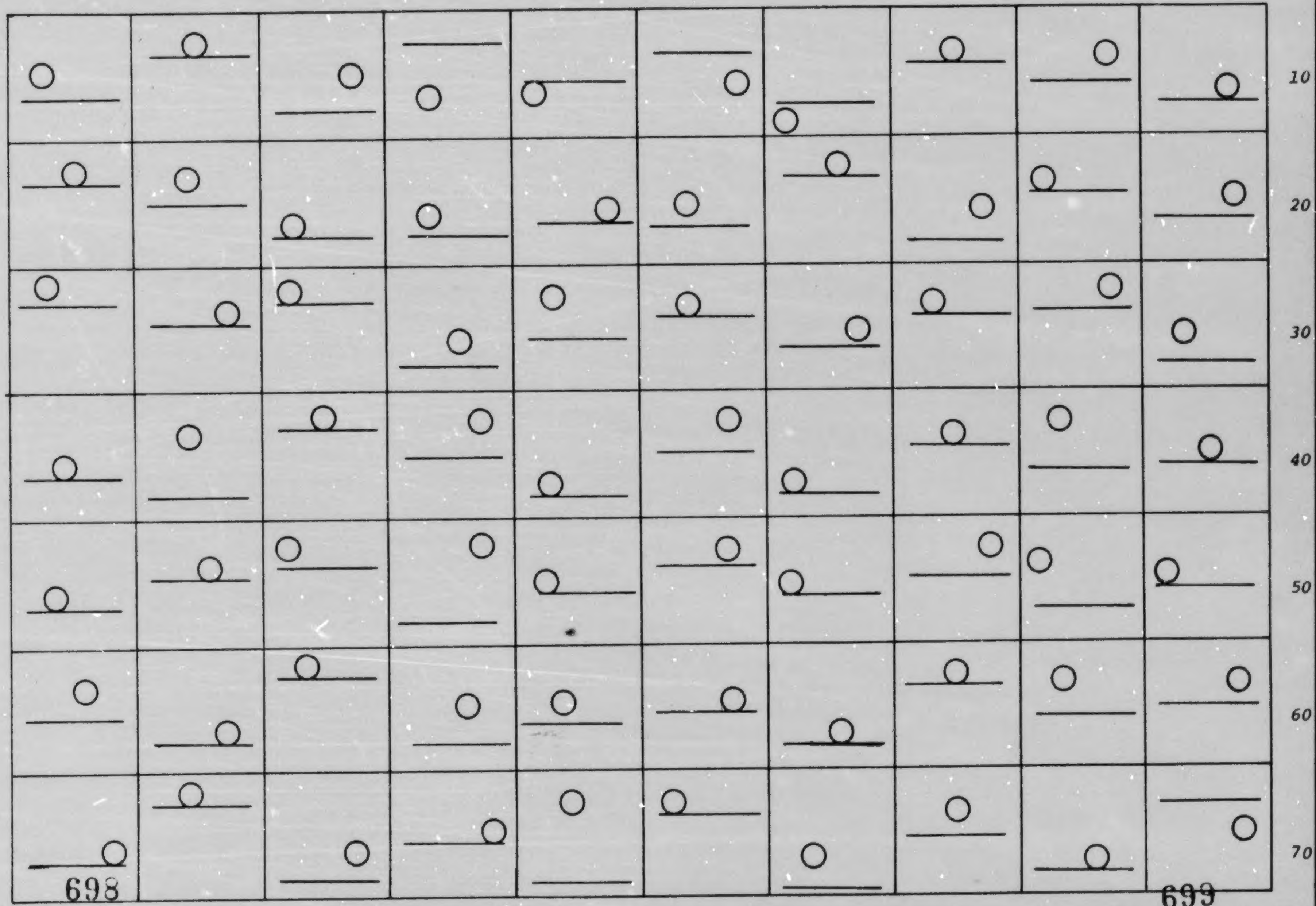
70

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say
see-mark

RR-8

(On/Off)


10
20
30
40
50
60
70

698

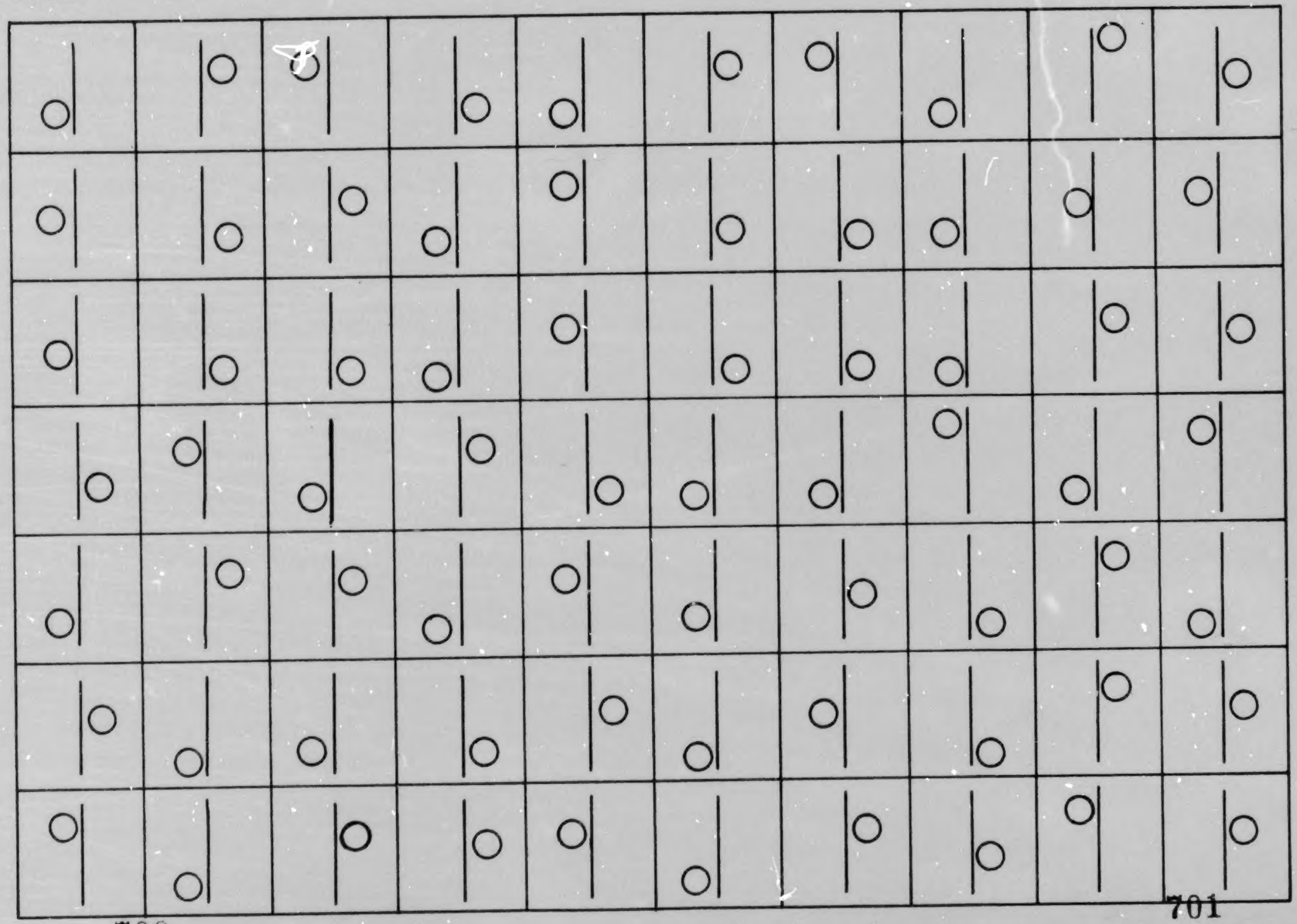
699

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say
see-mark

RR-9
(Left/Right)


10
20
30
40
50
60
70

700

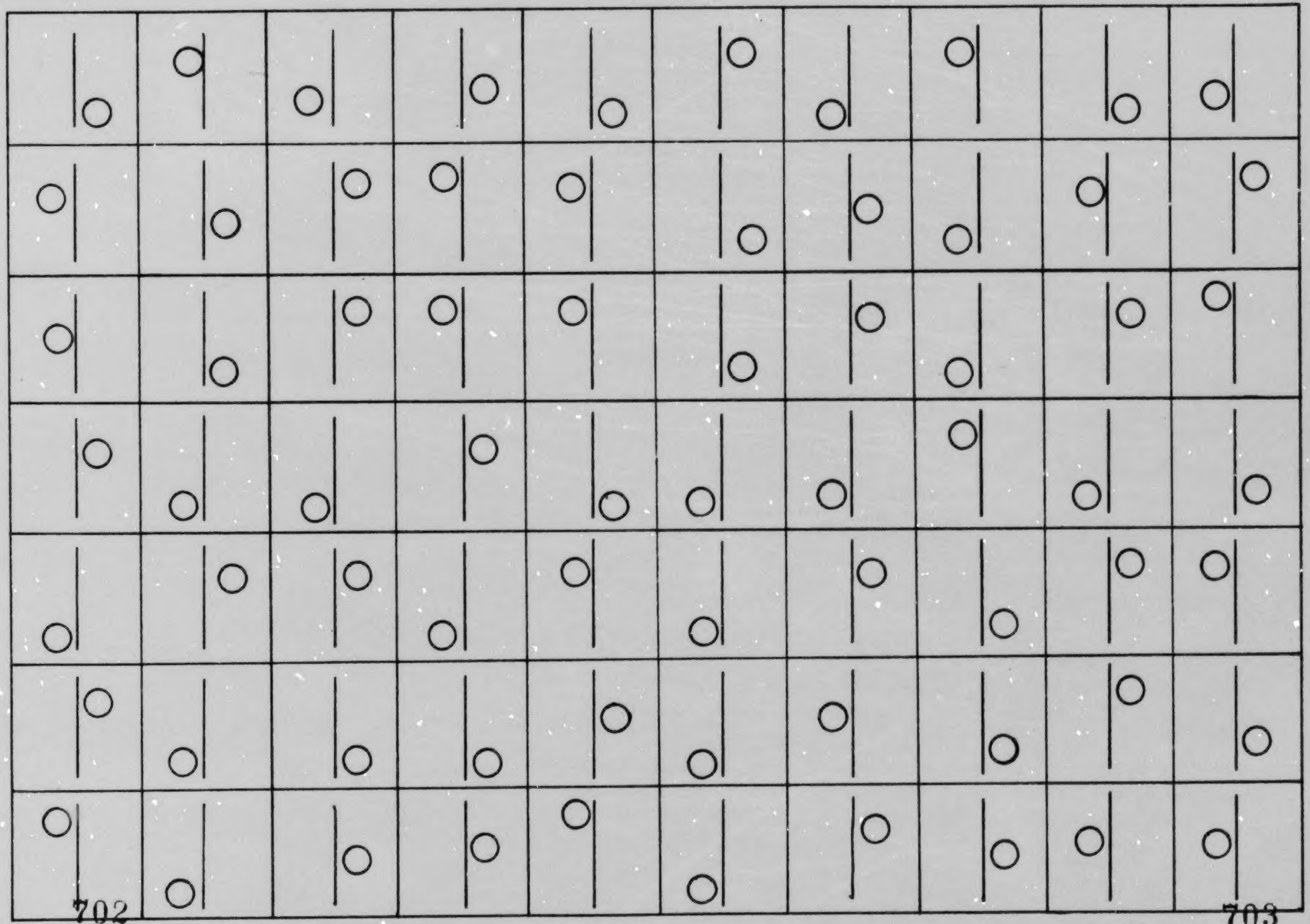
701

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say
see-mark

RR-10
(Before/After)


10
20
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70

702

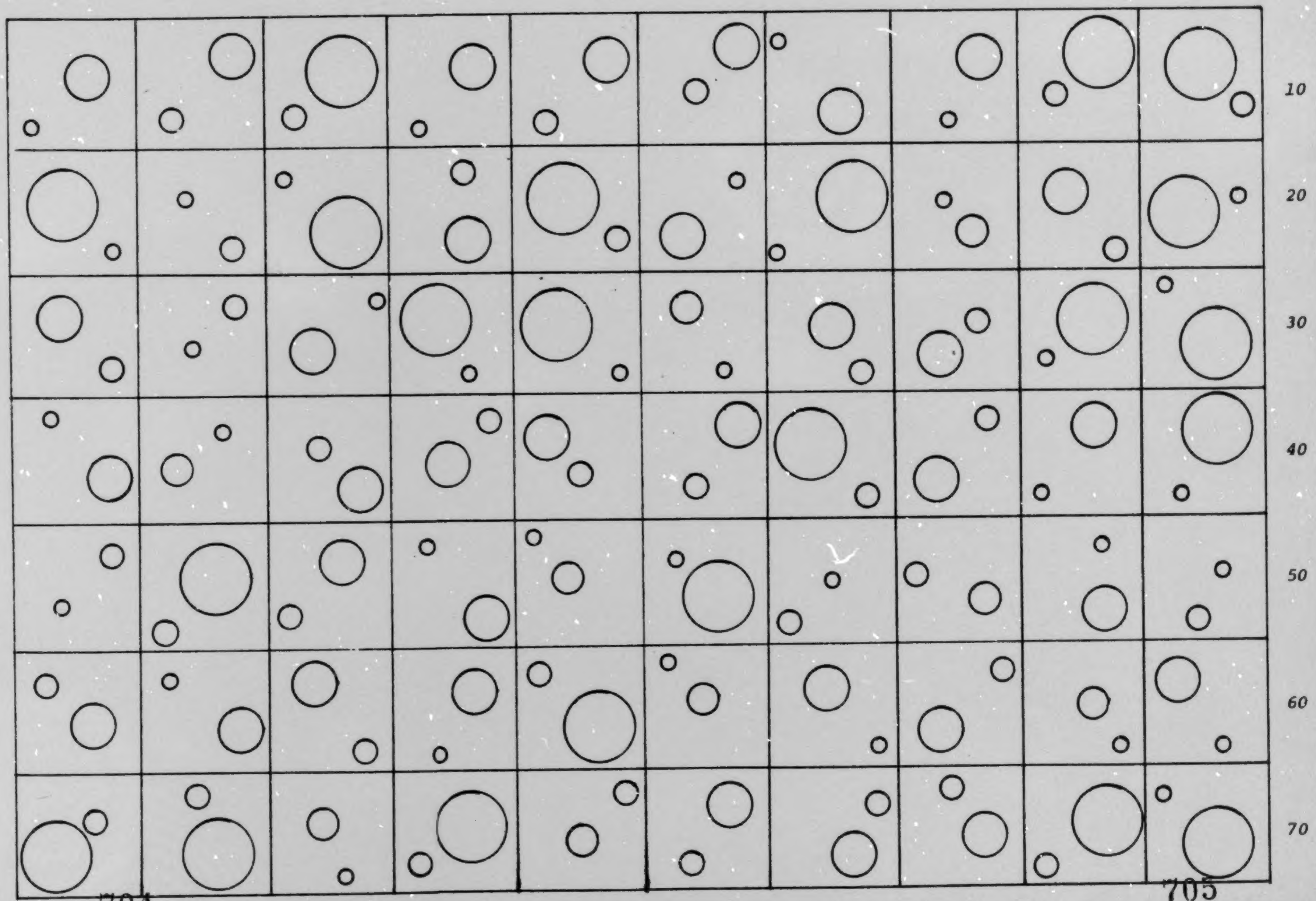
703

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

RR-11

(Big/Little)


10
20
30
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60
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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

RR-12

see-say
see-mark

(Up/Down)

↑	↓	↓	↑	↓	↑	↑	↓	↑	↓	10
↓	↑	↓	↓	↑	↑	↓	↑	↓	↑	20
↑	↓	↓	↑	↑	↓	↑	↓	↓	↓	30
↓	↑	↑	↓	↓	↑	↓	↑	↓	↑	40
↓	↓	↑	↑	↓	↑	↓	↑	↓	↑	50
↓	↑	↓	↑	↑	↓	↑	↓	↓	↑	60
↑	↓	↓	↓	↑	↑	↑	↑	↓	↓	70

ORANGE COUNTY PUBLIC SCHOOLS
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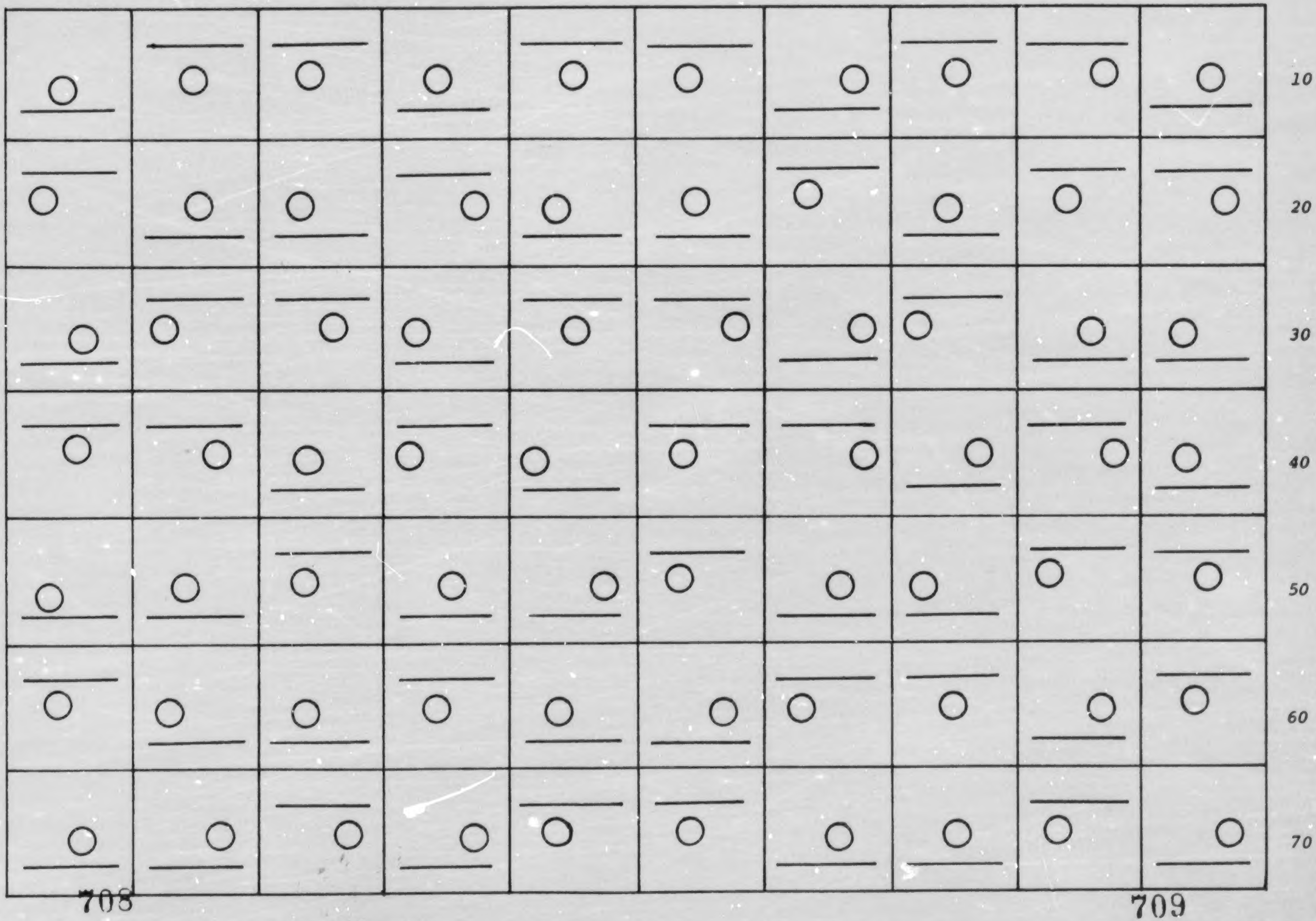
ORLANDO, FLORIDA

see-say
see-mark

RR-13

(Above/Below)


10
20
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40
50
60
70

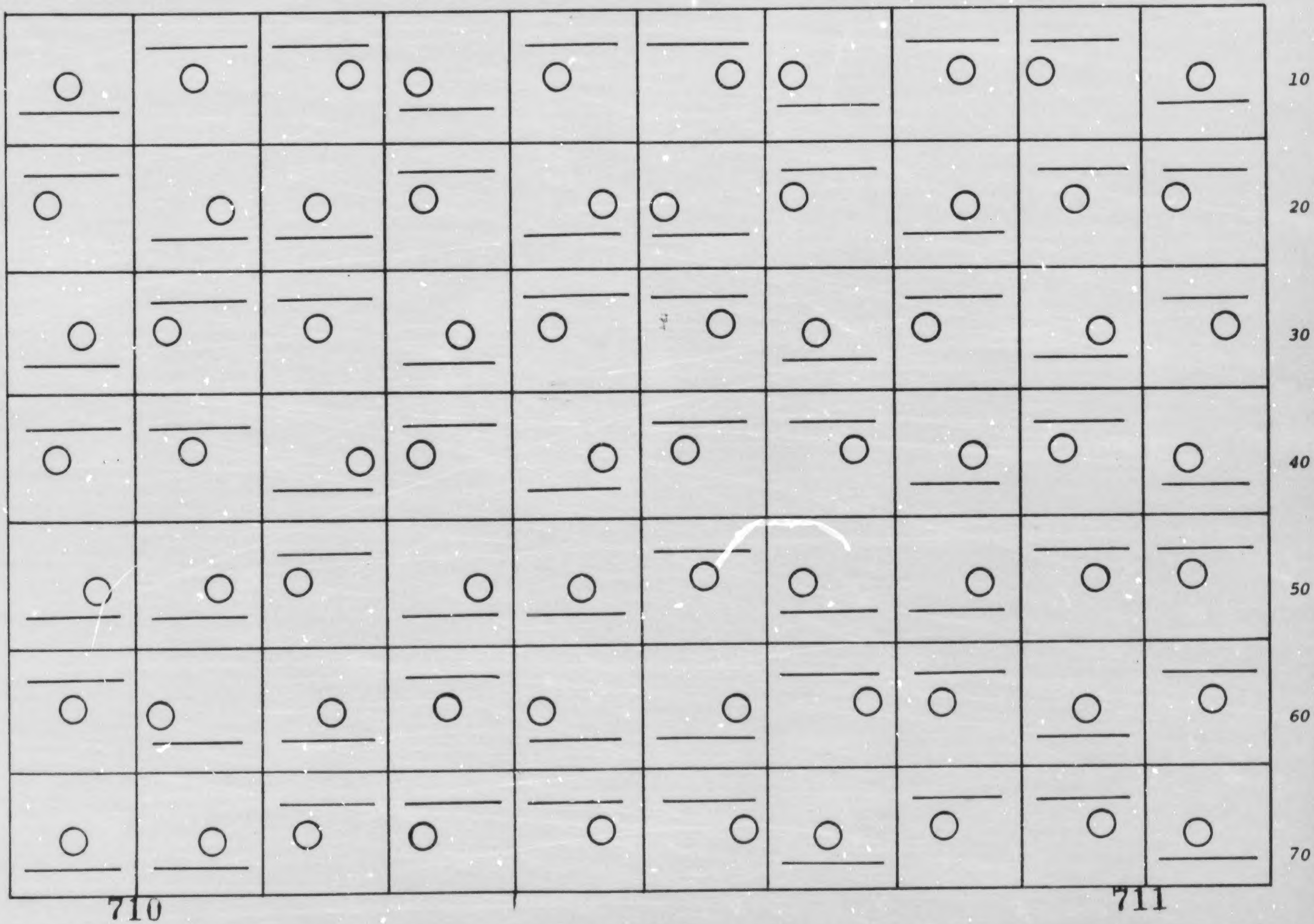
708

709

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say
see-mark

RR-14
(Over/Under


10
20
30
40
50
60
70

710

711

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

RR-15

hear-say

Phrases

Have the student repeat the sentence after someone says it first

He ran. 2

She ran. 4

He ate the apple. 8

We like Candy. 11

The dog ran fast. 15

The cat ate fish. 19

The boy played games. 23

The man was driving a car. 29

She wanted him to jump rope. 35

The painter painted the house red. 41

John goes to the school in town now. 49

He wanted to write his name on the white paper. 59

She wanted him to count the red and blue checkers. 69

A big black cat and a little dog sat in the street. 81

The book was about the yellow duck and the red bowl. 92

He used to ride a big yellow bus that went up and down the hill. 107

They walked to the little store down the street to buy some milk and bread. 122

She gave the man two nickels and three quarters to pay for the milk and bread today. 139

He wrote his name and address on the big brown envelope and put it in the box. 156

Tommorow we will go for a ride in the new car to see the pretty country. 182

It is beneficial for the teacher to devise direction practice sheets that will relate more to the students' everyday work. Directions can be given to students orally and the responses written within one minute. Since a few answers on directions require spelling it is best to give credit for each letter written in correct order. Any omissions are counted as errors. For example, if a student writes her name KATY for Kathy the count would be 4 correct and 1 incorrect.

It may be advisable to increase timings to two or three minutes if one minute does not seem long enough for the students to complete the answers. For any timing over one minute the correct and incorrect score should be divided by the number of minutes to get the count per minute. (For example, Correct score = 28, Incorrect score = 6, Time period = 2 minutes. 28/2 = 14 correct count per minute. 6/2 = 3 incorrect count per minute.) These scores can now be recorded and charted.

Sample Directions:

1. Write your name

2. Circle the first word

3. Put an X on the tree

RR-17

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see-mark

Matching Letters

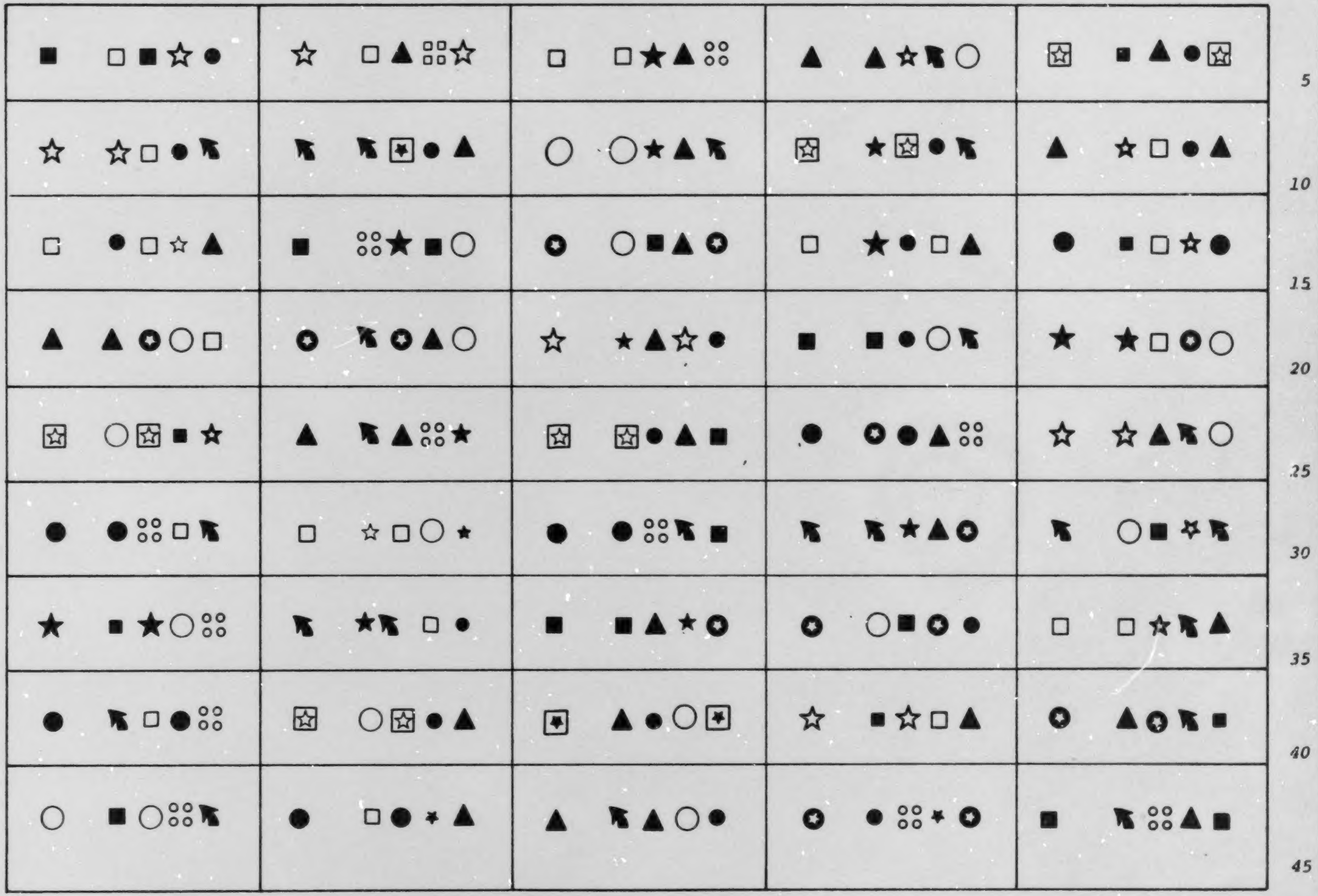
Mark the matching letters in each box

q	o u c q	a	s a e c	w	o m w c	3
z	s e i z	d	d p b f	x	x s t f	6
w	u q w x	f	h l f p	e	c o e s	9
x	x a w y	g	q g s j	v	w m u v	12
e	d e c o	h	d y b h	t	f t h l	15
c	d e p c	j	j g y w	y	n o w y	18
r	e r f c	k	d k t h	u	n m p u	21
v	v u w y	l	t l f g	i	j k f o	24
t	k f t h	o	c o e s	p	p b g y	27
b	p q d b	s	s t c e	o	c o a p	30
y	p j g y	b	d b p c	a	h a c b	33
n	m n w r	c	o e c g	q	g p q h	36
u	w u o y	h	h d s f	j	j p y n	39
m	n x m u	z	u z w s	m	n w m r	42
i	j t i l	r	n r u w	f	t l f s	45
p	q p d b	q	p q g y	l	f h l k	48
n	r t u n	e	m e c p	g	p f i g	51
j	c j g p	f	q t v f	l	l f d c	54

see-mark

Matching Shapes

Mark the matching shapes in each box


5
10
15
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25
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35
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45

ORANGE COUNTY PUBLIC SCHOOLS
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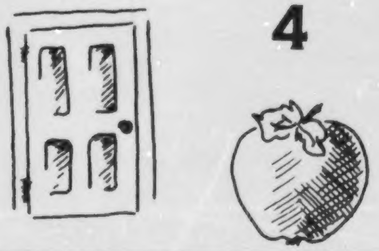
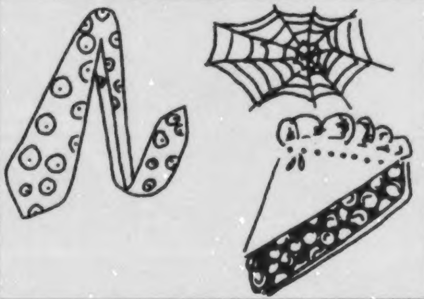
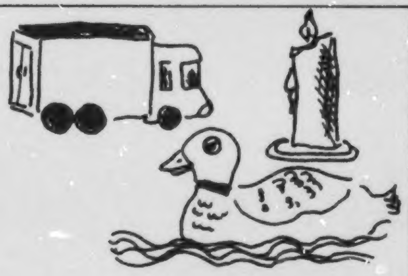
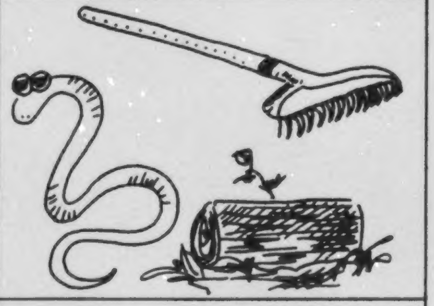
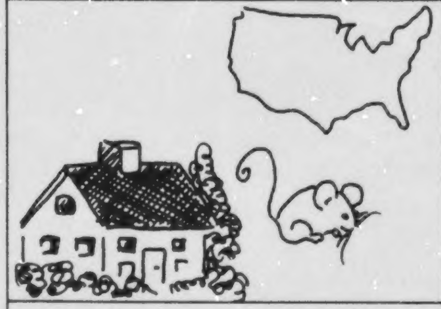
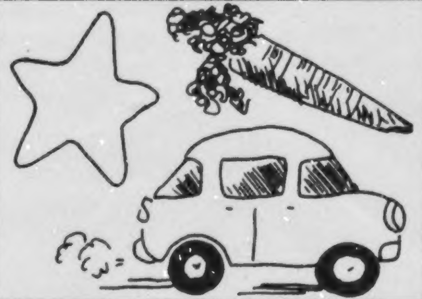
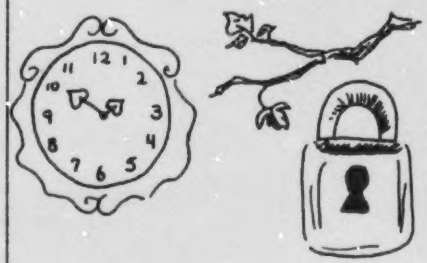
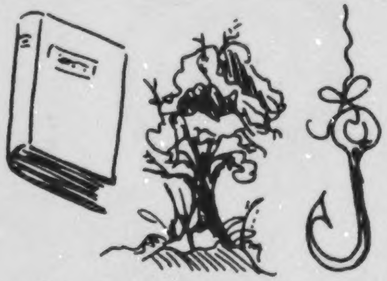
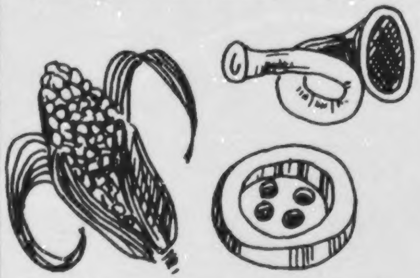
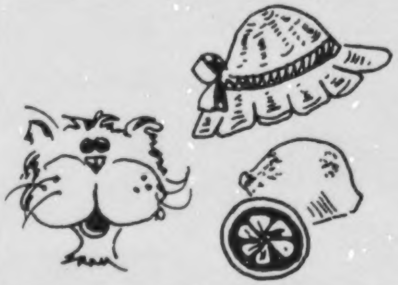
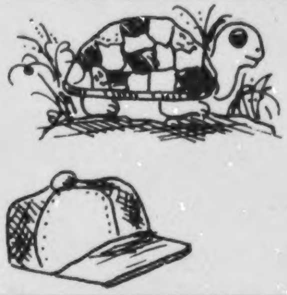
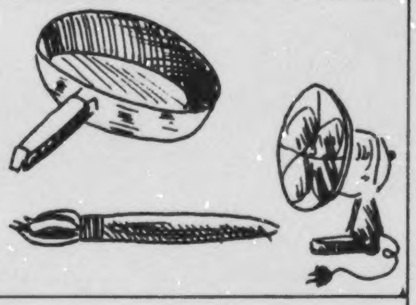
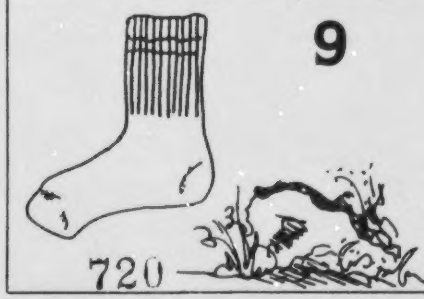
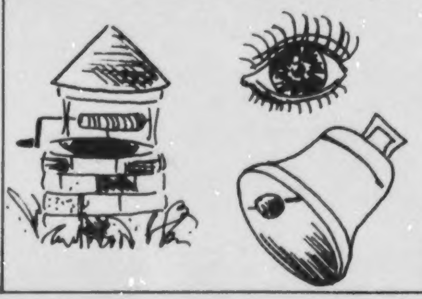
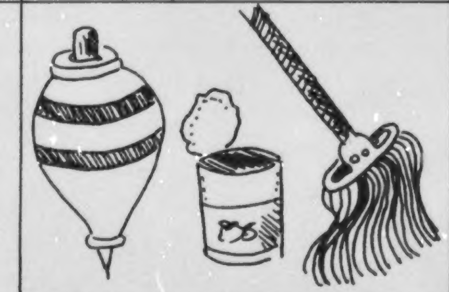
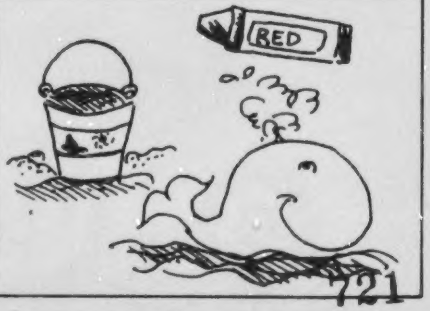
ORLANDO, FLORIDA

RR-19

Rhyming Pictures

Mark the words in each box that rhyme

				8
				16
				24
				32

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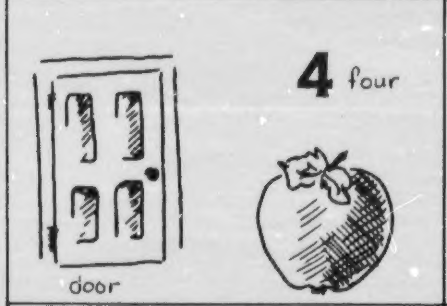
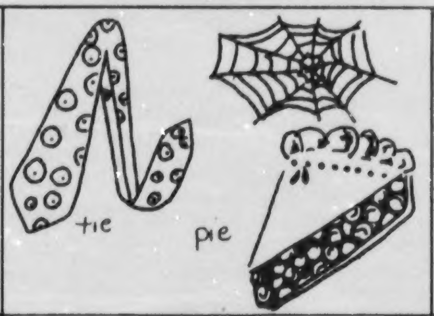
ORLANDO, FLORIDA

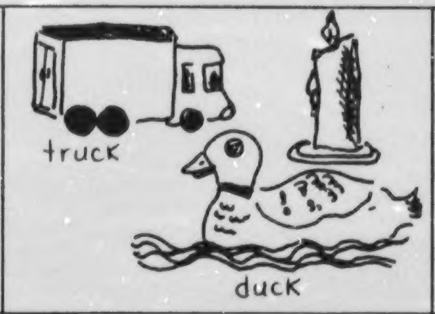
RR-19A

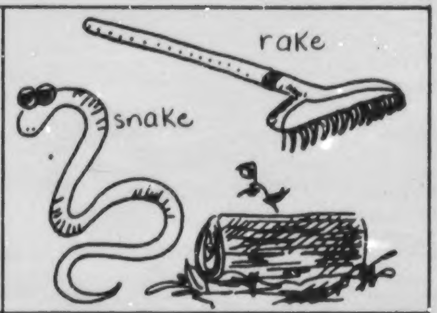
Rhyming Pictures
Answer Key

Mark the words in each box that rhyme

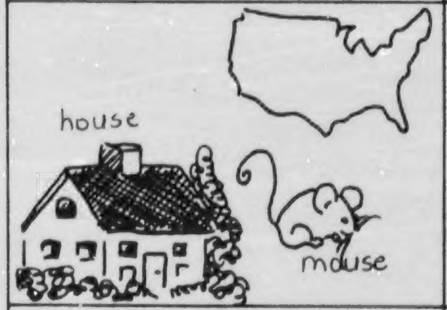


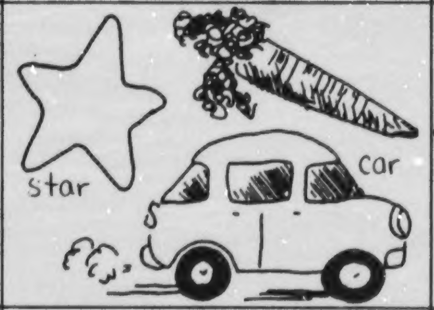


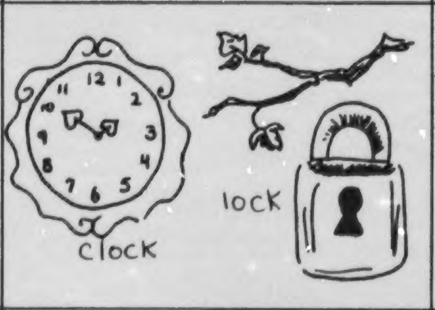


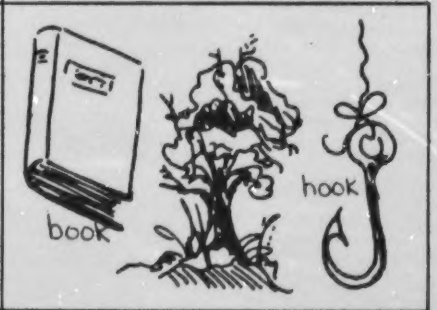


8

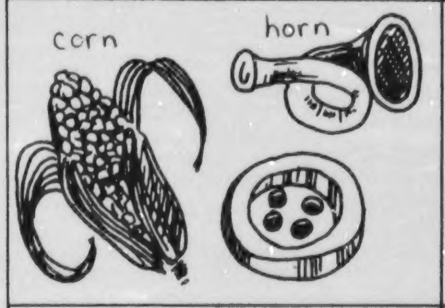

house
mouse

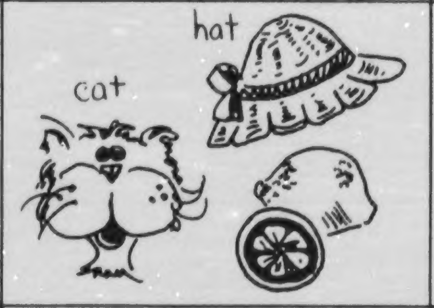


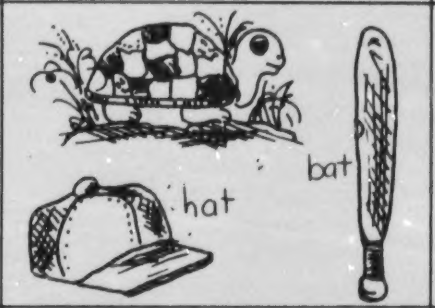


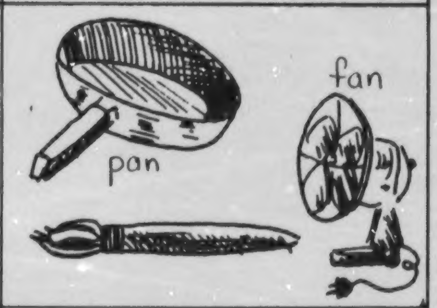


16

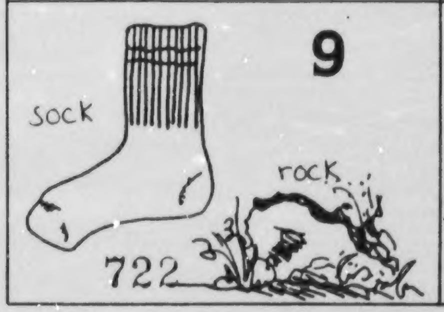


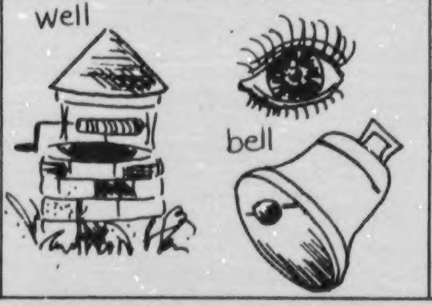


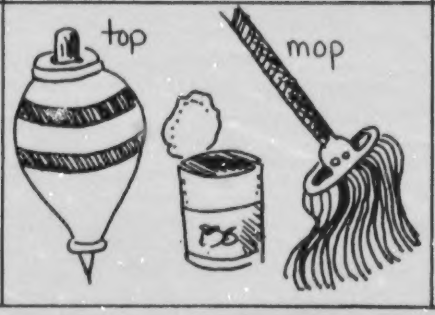


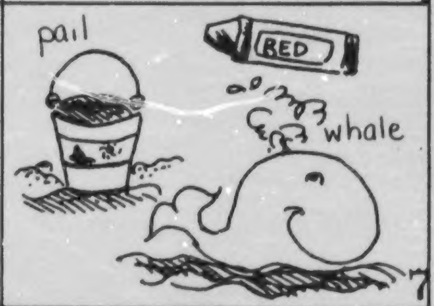


24








pail
RED
whale

32

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

RR-20

think-say

Alphabet

DIRECTIONS:

The student says the alphabet orally repeatedly for one minute. One correct count is given for each letter the student says in correct sequence. Each omission is counted as an error.

Example: If the student's response in one minute is a b c d e f g h i j k l m o p r s t u w x y z/a b c d e f h, the count would be 30 correct and 4 incorrect.

A quick way to find the count is to multiply the number of times the alphabet was completed by twenty-six. (the number of letters in the alphabet) Be sure to add any extra letters that were said.

Example: The alphabet was repeated 5 times with these extra letters:
a b c d e f g h i
5 x 26 = 130 + 9 = 139 correct, 0 incorrect.

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

RR-21

see-say

Lower Case

k	u	r	w	h	o	q	d	l	x	z	t	m	e	n	c	i	a	b	*19*
v	p	s	f	q	y	j	t	n	h	j	o	w	a	c	l	d	k	m	*38*
z	p	f	g	s	y	u	x	e	q	i	r	b	v	p	f	t	l	b	*57*
e	q	g	h	c	i	n	x	k	u	s	j	y	r	z	w	d	o	a	*76*
v	m	n	a	e	k	z	d	s	p	q	o	j	i	w	r	y	g	b	*95*
f	h	o	l	x	t	m	n	z	d	c	b	i	a	q	y	j	k	g	*114*
e	s	h	q	n	c	i	p	a	u	y	f	j	k	x	r	w	o	d	*133*

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

RR-22
Upper Case

T	D	I	N	J	H	K	U	B	L	R	V	F	Y	P	C	E	G	M	19
O	Z	A	X	S	W	Q	Z	M	T	W	X	F	C	K	A	R	E	L	38
H	G	N	I	O	Q	V	Y	U	S	P	B	J	D	Y	K	T	M	W	57
F	X	Z	N	O	Q	A	U	J	L	B	E	H	R	V	I	S	P	D	76
G	C	Y	B	V	R	X	N	W	P	E	D	Q	S	H	K	U	M	A	95
D	B	W	Y	G	U	A	H	V	C	P	R	N	X	K	M	Q	E	S	114
V	R	D	A	P	K	W	X	Y	B	U	H	M	Q	E	N	S	V	I	133

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

RR-23

Letter Names
(Upper/Lower case)

t	R	e	T	n	Q	d	S	C	F	r	I	z	o	Y	o	u	b	X	*19*
g	x	U	l	B	G	N	O	A	D	K	y	h	W	i	J	E	M	J	*38*
q	V	v	a	f	s	L	P	Z	H	w	m	i	P	d	s	X	r	t	*57*
Q	w	g	A	f	O	b	e	h	Y	I	K	v	a	y	n	C	D	i	*75*
j	R	p	T	B	o	M	V	E	U	N	J	W	x	H	L	z	q	Z	*95*
b	F	c	d	h	J	G	N	l	k	y	w	V	x	S	u	t	r	o	*114*
R	e	H	s	i	X	J	w	a	G	U	o	b	D	n	c	A	Z	u	*133*

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-mark

RR-24

Matching Letters

Mark the matching letters in each box

Q	O q P y	A	a C d o	K	Y z k e	G	A g X 1	4
Z	R z n S	D	X 1 d e	H	D x h 1	M	C Q r m	8
w	M o g W	h	H L m s	M	m d o s	d	D o S 1	12
x	S X r t	p	Q R P o	r	R c W e	N	Y t n u	16
e	E s N o	F	A f Y q	l	F L Q p	v	V m B d	20
C	d c t s	k	K b g h	n	g e N M	Z	X z p s	24
R	n Q G r	I	L Z 1 m	L	o l s t	o	D b O l	28
V	W v M B	a	B A v s	o	h O Q r	q	s g H Q	32
t	B e T g	B	T b F N	q	B g R Q	C	P J c O	36
b	H 1 B k	E	e C o u	S	F J M o	h	H u S a	40
y	x Y s d	J	X R J v	u	I U E N	R	n J M r	44
N	C n P m	s	v S M f	X	1 P x G	I	l Z 1 G	48
U	l J u I	v	T V a b	O	d s Q o	t	f T K o	52
m	g M p l	z	h Z g Q	P	M u p g	e	D E h B	56
d	c D o l	W	H n W J	T	v t J N	Q	G n c q	60
f	d p F S	c	t u S C	Y	b s a y	J	g J q s	64
g	u v G L	G	f P O g	b	t e I B	l	W L p z	68
J	J R s Q	1	L I b e	f	A F X S	Y	S t y V	72
P	c r p l	D	d m b s	r	R x P a	e	q t E B	76

RR-25

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

hear-write

Writing Letters

DIRECTIONS:

This task may be measured several different ways. One, ask the child to write the upper case form as you dictate letter names. Second, ask the child to write the lower case form as you dictate letter names. Third, have the child write the form you dictate, "upper case a", "lower case f" etc..... Always be sure to use a random order of letter names. Check the number of correct and incorrect letters written.

PHONETIC ANALYSIS

PA-1	Consonants
PA-2	Vowels
PA-3	Consonants & Vowels
PA-4	CVC
PA-4a	CVC "a"
PA-4b	CVC "i"
PA-4c	CVC "o"
PA-4d	CVC "u"
PA-4e	CVC "e"
PA-5	CVCE
PA-6	CVC & CVCE
PA-7	Blends
PA-8	Digraphs
PA-9	Blends & Digraphs
PA-10	Regular Vowel Combinations
PA-11	Irregular Vowel Combinations
PA-12	Vowel + r
PA-13	Vowel Combinations (Mixed)
PA-14	Hard - Soft "G"
PA-15	Hard - Soft "C"
PA-16	Hard - Soft "G & C"
PA-17	Mastery Words

PA-1

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Consonants

w	n	g	y	j	r	m	t	d	l	*10*
c	k	b	v	f	s	h	z	p	n	*20*
z	r	v	y	f	s	p	j	l	d	*30*
m	c	b	h	k	w	t	g	s	m	*40*
w	n	y	t	b	d	r	g	p	j	*50*
h	c	l	z	k	v	f	m	r	f	*60*
p	l	c	d	w	y	h	v	g	t	*70*
b	j	z	n	s	k	t	f	v	p	*80*
b	k	h	s	c	r	z	w	n	y	*90*
d	g	m	j	l	h	r	m	w	f	*100*

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

PA-2

see-say

Vowels

u	a	i	e	o	a	o	e	i	u	*10*
o	u	i	a	e	i	o	e	u	a	*20*
e	i	o	a	u	i	o	u	a	e	*30*
i	o	i	a	u	e	i	a	e	u	*40*
o	u	e	i	o	a	u	e	o	i	*50*
i	a	o	i	e	u	e	i	o	u	*60*
a	u	e	a	i	o	e	u	o	a	*70*
i	o	u	e	a	i	o	e	u	a	*80*
u	a	e	i	o	e	u	o	a	i	*90*
a	o	i	a	e	u	i	a	u	o	*100*

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

PA-3
Consonants & Vowels

n	s	z	p	m	r	v	b	k	e	*10*
t	c	d	i	f	o	h	a	y	g	*20*
w	l	u	n	s	p	z	r	u	d	*30*
e	f	b	a	o	m	c	y	v	k	*40*
l	i	h	t	g	j	w	u	t	w	*50*
e	s	n	k	j	f	r	c	h	l	*60*
d	p	o	i	a	v	m	b	g	y	*70*
z	o	m	z	n	k	y	r	v	w	*80*
h	b	g	p	a	e	t	i	c	j	*90*
l	d	u	s	f	y	f	l	a	r	*100*

PA-4

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

CVC

nap	tip	leg	tin	fix	map	cub	fan	cut	vet	*10*
mom	sip	dim	web	rig	bed	dug	keg	pop	tum	*20*
yam	cap	hip	bun	yes	hot	mum	fib	hug	fat	*30*
sun	sit	bob	fiz	rag	sob	rod	zip	lug	pen	*40*
zap	tax	pet	cop	tot	hid	rag	him	run	hum	*50*
rut	web	men	sax	liz	mum	tax	rut	hen	cub	*60*
bed	hip	hen	tip	map	lug	sit	fat	liz	rod	*70*
rod	run	hug	men	dim	cap	sun	hot	yum	sob	*80*
hid	rig	hum	vet	dug	cop	sax	[illegible]ap	tin	fiz	*90*
bun	cut	fan	fix	fib	wig	mom	pop	sip	bob	*100*
pet	keg	zip	pen	tot	yes	nap	leg	him	men	*110*
yum	fan	mum	hip	fiz	pet	mom	bob	zip	sip	*120*
dim	web	yam	rig	bed	dug	keg	pop	yum	wig	*130*

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

PA-4a

see-say

CVC "a"

sap	gag	tax	yak	dab	bad	ran	dam	mad	man	10
nab	rag	has	rat	wag	hat	sad	rap	jab	pat	20
gab	mat	bag	tap	hag	cat	sag	bat	fan	dam	30
fat	jam	tan	cap	ram	had	lap	sat	ban	map	40
tab	yam	nap	ham	can	jag	pad	nag	pan	tag	50
jab	dam	sad	sap	jag	fat	yak	rag	cat	yam	60
tag	bat	tab	tax	hag	ram	tap	nap	bag	tan	70
jam	has	ran	cap	gab	pan	hat	wag	can	sat	80
rap	mad	map	pad	ban	pat	man	rat	nap	fan	90
gap	bad	ham	had	lap	mat	sag	yam	dab	nag	100
bad	tap	sag	cap	jam	gap	can	gag	cat	ban	110
dab	fan	ran	rag	sap	tax	nag	has	pat	jag	120
nab	gag	man	yak	tax	bad	ran	gap	dab	mad	130

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

CVC "i"

him	fiz	sid	him	rig	dim	din	mid	his	rim	10
kit	sip	rig	hit	did	tin	rip	bid	Tim	pin	20
lip	hid	sit	nib	pit	fin	bit	six	rid	vim	30
fit	sin	fix	dig	kid	Jib	fig	bib	Jim	wig	40
dip	wit	fib	nip	Jig	mix	tip	big	sis	hip	50
bit	Jim	wit	fix	bin	Jig	din	sin	fit	mid	60
vim	bib	pin	lip	hid	sin	did	dim	fiz	dip	70
tin	rig	kit	fin	kid	rip	bid	sip	him	Jib	80
Tim	his	fib	sis	nib	rid	rim	mix	hip	six	90
dig	hit	pig	pit	wig	tip	kid	sit	fig	nip	100
jib	mid	dip	big	fib	nip	pin	fit	fix	sit	110
sis	big	nip	hid	Jig	six	nip	hip	him	fix	120
sid	him	rig	dim	din	mid	his	bid	kit	sip	130

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

CVC "o"

PA-4 c

sob	rod	bog	con	top	hog	cob	jot	rob	not	10
lox	job	fox	log	hop	cog	hop	mob	pot	fog	20
cod	dot	mom	bop	Tom	Tod	lot	hot	gob	Ron	30
cop	Bob	sop	sod	nod	cot	jog	Don	pod	tot	40
mop	box	rot	fog	bop	Tom	cob	hog	mop	cog	50
fox	top	Tod	lot	nod	sod	mob	Bob	rod	box	60
cod	log	hop	mom	pod	pot	lox	jog	gob	hop	70
sop	hot	cot	bog	Rob	Don	cop	dot	rot	job	80
tot	sob	not	con	jot	Ron	not	jot	hop	job	90
hot	Ron	cob	bop	sop	mob	Tom	cog	bog	mop	100
cod	top	jog	hop	lox	sob	Don	log	fox	mom	110
lot	gob	sod	box	cop	tot	pod	Rob	con	rot	120
job	fox	log	hop	cog	hop	mob	pot	fog	cod	130

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

PA-4 d

see-say

CVC "u"

bug	but	rug	jut	sub	dun	cut	sup	fun	dug	10
run	tug	gun	tum	yum	bun	bus	mug	hug	rum	20
gut	tub	gun	gut	Gus	dud	pup	rut	run	hub	30
hut	Jud	tug	nut	rub	run	pub	bum	lug	dud	40
gum	tub	jug	cud	nun	cud	rug	lux	dug	cup	50
jug	pun	dud	bum	bun	sum	nut	tug	gut	hug	60
rut	mug	Jud	dun	but	yum	rug	bug	pub	rum	70
gum	rub	dug	pun	sup	tum	lux	mug	bud	cup	80
jut	run	lug	pub	Gus	but	cub	nun	sub	tug	90
tub	hut	dud	bus	cud	hub	sun	rug	cut	gun	100
bun	yum	jug	sun	nut	tug	fun	rut	lux	bug	110
jut	but	dun	cud	bum	rug	sum	gut	cub	dug	120
bug	hub	rug	jut	sub	dun	jug	sup	fun	cut	130

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

PA-4 e

CVC "e"

pet	Ted	hen	Rex	red	set	yes	peg	vex	den	10
wed	bet	pep	pen	hep	led	let	ten	leg	wet	20
fed	men	met	web	vet	bed	hem	peg	yen	Meg	30
Ted	Les	Deb	keg	beg	Tex	get	yet	Ned	Ken	40
net	Ben	jet	hex	ten	Jed	Lex	hen	beg	Les	50
men	pet	Jed	hem	Meg	hex	den	Peg	Ted	Rex	60
red	pep	jet	Lex	leg	pen	net	led	wed	get	70
jet	Ned	vex	bet	fed	set	met	keg	yes	let	80
Deb	Tex	Ken	wet	bed	Peg	web	vet	yen	Meg	90
Ben	yet	Ted	pen	hen	met	red	vex	den	wed	100
let	pet	keg	Lex	fed	ten	jet	web	leg	keg	110
Lex	men	net	Deb	pep	Meg	hep	Ben	get	Tex	120
yen	Ted	hen	Rex	red	set	Ned	Peg	yes	den	130

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

PA-5

see-say

CVCE

bite	save	yule	robe	pave	bake	lone	tire	home	9
joke	cure	zone	duke	game	vote	rule	kite	nape	18
lime	same	time	wove	here	mute	tame	lure	mule	27
pole	sale	tune	poke	made	mere	hope	bone	line	36
wife	sake	tide	side	name	cube	dune	mope	ripe	45
fume	pile	zone	rope	pure	tale	file	tone	tube	54
base	time	cure	here	kite	joke	bite	same	lime	63
tame	bone	made	save	cube	ripe	pave	yule	base	72
tube	mere	dune	wife	sale	game	pure	tire	name	81
poke	robe	rule	tone	mope	side	tune	fume	bake	90
lone	mule	wove	vote	zone	mute	duke	tale	hope	99
file	sake	rope	pole	tide	lure	zone	home	pile	108
line	nape	tone	base	zone	time	bake	yule	joke	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

CVC & CVCE

fume	here	file	rod	mile	five	rope	poke	man	9
zone	tip	name	not	bone	cab	mere	tape	hive	18
fat	mit	pep	robe	dud	nut	led	game	big	27
got	hot	line	bet	web	rot	sun	bit	rule	36
hit	ham	bun	wife	late	wet	jam	fun	sake	45
tone	got	game	bone	poke	sun	bet	cab	hive	54
rope	file	wife	bun	sake	jam	fun	nut	man	63
late	rot	tone	web	pep	rod	big	line	fat	72
name	five	led	mere	zone	mile	robe	rule	wet	81
hot	tip	bit	fume	bit	ham	same	here	not	90
tape	dud	hit	name	mile	mere	game	hit	rule	99
rope	here	late	got	tip	web	bit	jam	fat	108
cab	hive	five	not	bet	rod	pep	bun	nut	117

PA-7

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Blends

skill	snug	stress	silk	squint	skate	stroke	shrill	skin	9
drove	smash	swept	brisk	press	scrape	grant	spill	split	18
clap	print	drift	grip	stilt	stove	splint	yelp	drag	27
shrimp	glad	crate	scruff	tramp	plant	flag	crust	milk	36
sled	trap	slept	floss	strip	swim	globe	clump	smoke	45
stamp	cram	blame	brass	scrap	grove	spot	frog	blot	54
plum	snuff	bend	skin	scruff	stress	stove	print	smash	63
silk	splint	cram	flag	brisk	grove	stamp	frog	scrape	72
squint	spill	trap	slept	drove	strip	glad	sled	grip	81
crust	stroke	brass	shrill	drift	clump	globe	smoke	skate	90
drag	crate	snug	swept	stilt	snuff	blot	shrimp	floss	99
spot	yelp	milk	scrap	blame	bend	grant	plum	split	108
swim	tramp	skill	plant	press	clap	scrape	milk	trap	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

PA-8

see-say

Digraphs

shun	whet	shed	shag	chap	thud	phone	shut	Phil	9
thin	chip	them	when	skip	shot	dash	path	these	18
mesh	than	hatch	cash	fetch	thus	then	bath	this	27
chat	patch	hitch	wish	that	whip	which	lash	with	36
check	ship	chop	chit	graph	shine	while	shin	itch	45
chose	thug	dash	shin	shot	that	when	hitch	fetch	54
Phil	itch	thin	chop	lash	thus	them	skip	this	63
path	check	chip	chat	wish	shag	chose	patch	chap	72
phone	bath	ship	shed	whet	with	than	which	graph	81
hatch	cash	whip	then	these	whine	shut	thud	while	90
shun	chit	mesh	cash	while	when	path	then	shot	99
lash	which	shine	whip	mesh	shin	chip	hatch	chop	108
thud	shun	this	whet	hitch	skip	thug	check	shun	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

PA-9
Blends & Digraphs

shot	when	chose	bunch	scruff	crush	brake	them	slush	9
slide	while	globe	plush	blame	drug	thus	flake	mesh	18
step	these	prone	chase	squid	clove	crane	frill	swell	27
which	chant	chump	plum	graph	grab	phone	strap	scrape	36
smile	trap	snake	skate	math	chop	sprig	shrill	hatch	45
thin	smash	stroke	check	prop	flash	those	prop	trap	54
shot	slide	chase	smile	math	sprig	globe	frill	clove	63
stroke	squid	chump	skate	snake	chop	drug	hatch	those	72
blame	graph	plum	thin	crush	thus	bunch	prone	strap	81
mesh	flake	swell	phone	which	chose	scruff	shrill	while	90
them	scrape	flash	brake	plush	when	slush	chant	step	99
check	smash	grab	crane	these	when	brake	hatch	smile	108
trap	scrape	prop	frill	chop	these	grab	swell	scruff	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

PA-10

Regular Vowel Combinations

groan	sprain	seal	throw	foam	speech	toast	wheat	foe	9
paid	croak	faint	soap	woe	gain	hoe	flown	pray	18
peel	coal	teach	pay	leap	clay	hail	crow	peak	27
toe	seem	stray	sweet	blow	pail	doe	least	sheet	36
say	float	day	bowl	sweep	heal	play	teeth	need	45
toad	creep	train	treat	sway	claim	peep	braid	peak	54
foam	sheet	braid	need	peel	stray	pail	train	sway	63
foe	speech	leap	pay	bowl	creep	croak	sweet	claim	72
play	blow	teeth	paid	clay	soap	hoe	flown	pray	81
least	sprain	hail	say	faint	crow	peep	groan	toe	90
heal	throw	toast	wheat	day	teach	float	toad	sweep	99
seem	treat	doe	gain	coal	woe	seal	toe	least	108
sweet	teeth	sweep	foe	need	speech	play	hail	foam	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

PA-11

see-say

Irregular Vowel Combinations

deaf	crowd	dew	shout	maul	grew	foot	bread	fault	9
cause	joint	boot	coin	saw	fowl	found	lawn	hook	18
toy	sue	veil	weigh	health	crawl	bound	town	foil	27
ploy	proof	hood	drawn	hue	wool	eight	moist	drown	36
claw	bloom	death	crew	boy	mouth	rein	thread	haul	45
blew	joy	true	stew	food	bound	blue	joy	shout	54
fowl	foil	true	lawn	haul	toy	dew	foot	crew	63
eight	ploy	moist	fault	blew	hook	boot	sue	found	72
death	crowd	rein	drown	saw	food	weigh	blue	claw	81
veil	crawl	boy	coin	deaf	joint	hue	health	bread	90
town	cause	drawn	stew	proof	thread	maul	bloom	hood	99
wool	grew	mouth	dew	crowd	food	stew	bloom	fowl	108
town	boot	blew	haul	foil	mouth	veil	crawl	boy	117

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

PA-12

see-say

Vowel + r

shirt	burst	girl	nerve	hurl	turn	dark	far	burn	9
horn	stork	card	curl	for	term	fern	park	fur	18
pork	firm	port	hard	birth	port	burn	farm	north	27
jerk	skirt	term	curve	fir	shark	spark	shirt	first	36
perch	dark	chirp	verb	church	verse	burst	stern	cork	45
fork	storm	tar	perch	firm	forth	curve	burst	chart	54
car	jerk	par	turtle	churn	morn	curl	purple	art	63
north	nurse	nerve	twirl	birch	Thursday	sharp	horn	fur	72
stern	squirt	purse	thirst	twirl	curl	spark	churn	shirt	81
horn	pork	jerk	perch	fork	car	north	purple	horn	90
burst	card	hurl	for	girl	dark	stork	term	burn	99
far	dark	turn	hurl	nerve	girl	burst	shirt	hurl	108
fur	park	fern	term	for	curl	card	stork	horn	117

OCPS
ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Vowel Combinations

eight	urge	good	blow	moon	soil	maul	peach	park
growl	boat	crow	burst	took	joy	sail	crowd	tread
teeth	north	tray	fault	nerve	shoot	joint	scout	toe
coy	meet	new	bay	meat	blew	feet	stew	mouth
found	coat	hoe	rue	pawn	stern	oil	flue	enjoy
hard	flue	shirt	port	health	draw	cow	rein	mail
firm	crow	hard	park	draw	tray	joint	maul	scout
coy	tread	mouth	meat	good	toe	soil	urge	fault
found	north	flue	port	peach	burst	blow	crowd	meet
firm	teeth	enjoy	rein	bay	shirt	feet	shoot	stern
oil	stew	growl	took	moon	hoe	boat	cow	joy
mail	health	nerve	blew	eight	rue	pawn	sail	new
coat	burst	joint	shirt	health	tray	park	cow	crow

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

PA-14

see-say

Hard-Soft "G"

gun	gem	glide	gentle	ledger	gate	rage	got	grip	9
ginger	grip	give	age	stage	gun	grave	gull	gulf	18
going	page	huge	rage	magic	cage	gin	charge	grill	27
strange	wage	large	grave	get	glad	huge	range	age	36
glass	guess	beg	great	grow	urge	gill	manage	voyage	45
big	great	orange	give	germ	guess	good	growl	change	54
forgot	bridge	gold	grade	charge	great	green	game	guard	63
singe	magic	serge	barge	wagon	tiger	dragon	tragic	gain	72
gem	again	giraffe	engine	eagle	giant	drag	gentle	wagon	81
huge	ledger	manage	gate	gill	magic	grill	large	page	90
huge	wage	gun	stage	voyage	grave	glass	gun	gem	99
got	rage	gate	ledger	gentle	glide	grip	ginger	age	108
stage	gun	grave	gull	gulf	going	huge	rage	magic	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

PA-15

see-say

Hard-Soft "C"

clamp	crust	cliff	cash	clamp	crib	trace	space	cash	9
cub	class	crust	mice	clod	cud	nice	circle	cent	18
ace	cane	clam	clean	prince	clam	rice	clip	cell	27
cinder	candy	trace	corn	cook	face	cap	cape	come	36
cup	fence	ice	place	cross	cliff	cow	brace	fancy	45
cute	cinch	clip	circus	pencil	card	came	cut	lace	54
cog	twice	click	space	except	central	clean	civil	citrus	63
carpet	pace	cat	peace	cute	cold	cape	cure	receive	72
can	corner	canteen	crust	prince	cap	fancy	twice	cub	81
ace	cinder	cup	cute	cog	carpet	citrus	receive	crust	90
peace	central	lace	cinch	place	face	rice	cent	club	99
spice	cub	cash	space	trace	crib	canteen	cash	cliff	108
crust	click	cane	ace	circle	cent	nice	cud	clod	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

PA-16
Hard-Soft "G & C"

wage	prince	corn	fancy	huge	club	glass	giant	cliff	9
space	bridge	carpet	magic	gulf	grill	circle	rage	cook	18
crust	gate	pencil	cage	change	ace	mice	guard	gun	27
click	glide	singe	twice	cub	fence	clamp	gentle	spice	36
cute	place	orange	gem	game	cold	grove	clip	gin	45
ice	got	candy	trace	gold	prince	trace	gate	cage	54
corn	wage	game	got	clamp	click	twice	fancy	orange	63
singe	gin	cliff	gentle	gulf	crust	fence	huge	space	72
place	gold	gem	pencil	bridge	change	spice	candy	gun	81
ace	circle	mice	glide	giant	guard	cook	rage	grill	90
magic	clip	cub	glass	club	cold	ice	grove	carpet	99
cute	candy	bridge	cliff	cub	gentle	magic	click	huge	108
pencil	clip	fence	change	game	gold	gun	club	guard	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

PA-17

see-say

Mastery Words

squeak	sprout	booth	glide	blouse	crawl	smash	thaw	when	9
throat	peel	rig	spine	shirt	farm	that	soy	ledger	18
men	weather	phone	sax	slept	peach	shine	spoil	clamp	27
trace	few	crook	duke	caught	blue	growth	health	sail	36
toe	play	clown	nerve	land	check	coat	burst	pew	45
grape	glow	freight	coin	prone	dud	port	quaint	phone	54
smash	few	shirt	land	blouse	health	sax	toe	trace	63
throat	glide	port	farm	spine	booth	crawl	slept	grape	72
weather	prone	when	sprout	nerve	play	check	quaint	peach	81
thaw	peel	caught	coin	crook	freight	growth	coat	men	90
blue	ledger	rig	soy	squeak	duke	that	pew	shine	99
spoil	dud	sail	clamp	clown	glow	burst	peach	when	108
throat	ledger	trace	men	toe	health	glide	clown	squeak	117

STRUCTURAL ANALYSIS

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SA-1

see-say

Noun Forms

armies	boxes	leaves	ponies	taxes	watches	glasses	churches	8
wolves	lilies	flags	pennies	days	gases	valleys	caps	16
cookies	knives	shoes	brushes	ladies	pianos	crosses	heroes	24
fairies	cherries	parties	babies	games	turkeys	chicks	toys	32
kisses	desks	cities	matches	inches	schools	stories	trees	40
dishes	copies	flies	puppies	sales	wives	chimneys	calves	48
trios	wives	cities	ladies	pennies	brushes	babies	knives	56
copies	heroes	sales	watches	turkeys	gases	games	inches	64
crosses	dishes	wolves	parties	cherries	puppies	fairies	ponies	72
stories	days	glasses	shoes	pianos	matches	valleys	lilies	80
trees	leaves	calves	armies	trios	boxes	churches	chicks	88
desks	caps	cookies	toys	flies	taxes	schools	kisses	96
flags	chimneys	glasses	watches	matches	kisses	leaves	brushes	104

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SA-2

see-say

Verb Forms

saved	rocking	raised	saved	pressed	crosses	riding	winning	8
poking	watches	bakes	running	rubs	loves	trimmed	jokes	16
skating	rakes	misses	climbed	trotting	cutting	dancing	picks	24
helping	wagged	driving	brushing	slipped	stopped	waving	cleans	32
lived	receives	liked	chasing	smiled	chasing	smiled	leaped	40
waxes	hopping	pastes	dropping	fishes	packed	passes	closed	48
learns	ripped	running	lived	waving	bakes	smiled	riding	56
riding	jokes	misses	ripped	cutting	slipped	driving	skating	64
winning	passes	packed	brushing	cleans	pressed	watches	saved	72
liked	rakes	trimmed	saved	hopping	receives	learns	raised	80
wagged	trotting	fishes	rubs	poking	helping	closed	pastes	88
stopped	chasing	dancing	loves	waxes	crosses	picks	dropping	96
rocking	climbed	leaped	dropping	stopped	fishes	hopping	jokes	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

SA-3
Adjective Forms

ripest	crazier	maddest	sillier	darker	cleaner	flattest	sweeter	8
fairest	greater	sicker	fatter	smoothest	brightest	finest	driest	16
prettiest	saddest	thinnest	lazier	silliest	easier	neatest	bigger	24
wider	hottest	colder	funniest	thinner	windiest	softer	bravest	32
fastest	slimmer	purer	luckier	loudest	quickest	bumpier	riper	40
nicer	whiter	cuter	nearer	shorter	largest	happier	longest	48
highest	quickest	luckier	prettiest	sweeter	colder	nicer	wider	56
highest	loudest	ripest	slimmer	neatest	darker	bravest	lazier	64
happier	sicker	cleaner	largest	thinner	fatter	brightest	whiter	72
shorter	thinnest	saddest	sillliest	riper	finest	windiest	flattest	80
bigger	funniest	nearer	crazier	bumpier	easier	driest	maddest	88
smoothest	longest	cuter	sillier	fairest	softer	hottest	purer	96
greater	fastest	bravest	quickest	luckier	silliest	nicer	whiter	104

SA-4

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Noun, Verb, Adjective Forms

happier	funniest	copies	makes	cherries	whitest	mixes	elves	8
stories	fishes	peaches	cuter	pasting	prettier	branches	claps	16
played	boxes	pianos	glasses	flatter	darker	sleeping	dishes	24
whipping	parties	pennies	smiles	mittens	smoked	finer	biggest	32
riper	baking	brushes	poked	thickest	robbed	dreamed	cleanest	40
driving	softer	radios	passes	stars	teaches	faster	swimming	48
hotter	wolves	batting	dropped	shelves	seals	dropped	robbed	56
whipping	claps	teaches	batting	happier	passes	stars	copies	64
cherries	mixes	flatter	smiles	swimming	branches	parties	dishes	72
cuter	brushes	thickest	mittens	prettier	pasting	shelves	whitest	80
glasses	makes	boxes	played	softer	riper	poked	radio	88
driving	darker	pennies	cleanest	funniest	elves	smoked	peaches	96
fishes	finer	biggest	sleeping	faster	baking	hotter	dreamed	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SA-5

see-say

Compound Words*

bedbug	sunset	sometimes	teapot	grandfather	himself	homework	7
rainbow	afternoon	trashcan	bedroom	within	roadside	suntan	14
pigpen	treetop	schoolhouse	gunmen	cowboy	boxtop	fireplace	21
boathouse	sandbox	somewhere	notebook	herself	bathtub	fireman	28
milkman	grandmother	basketball	outside	overhead	sailboat	hotdog	35
boxcar	snowflake	windmill	railroad	newspaper	carport	football	42
railroad	chalkboard	inside	flashlight	catfish	lighthouse	themselves	49
without	himself	without	boxtop	hotdog	railroad	inside	56
outside	basketball	windmill	rainbow	snowflake	bathtub	herself	63
homework	milkman	cowboy	pigpen	fireplace	afternoon	notebook	70
trashcan	suntan	sunset	newspaper	grandmother	overhead	bedbug	77
chalkboard	boxcar	sometimes	railroad	sailboat	themselves	catfish	84
bedroom	treetop	within	fireman	gunmen	lighthouse	boathouse	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SA-6

see-say

Suffixes

joyful	cheerless	eighth	inspection	thickness	goodness	timely	7
fourth	nervous	playful	shipment	detection	enjoyment	helpful	14
careful	harden	brighten	washable	thankful	harmless	hopeful	21
darken	breakable	painful	tenth	darkness	cruely	rocky	28
friendship	homeless	lovable	gladly	treatment	likable	neatness	35
fulfillment	dusty	spoonful	perfection	dealership	cranky	softly	42
straighten	humorous	membership	dangerous	selection	sleepy	careless	49
hardship	darkness	goodness	eighth	timely	perfection	breakable	56
darken	careful	washable	hopeful	dealership	cruely	gladly	63
selection	softly	sleepy	brighten	thickness	enjoyment	careless	70
joyful	cranky	nervous	thankful	painful	inspection	fourth	77
shipment	fulfillment	straighten	hardship	humorous	playful	tenth	84
membership	treatment	lovable	neatness	homeless	detection	helpful	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SA-7

see-say

Prefixes

misspell	invest	express	renew	mistake	discuss	exchange	7
inside	impolite	ensure	enlist	replant	misprint	depart	14
indent	defrost	impossible	displease	enlarge	depress	unhook	21
explain	improve	misuse	recheck	prefix	export	impure	28
demote	mistrust	uneven	reload	incorrect	enclose	uneasy	35
prevent	unlike	indoors	disobey	explore	derail	preheat	42
impress	dishonest	reread	enjoy	prepaid	prepare	disown	49
mistake	derail	defrost	ensure	unlock	indent	reload	56
unlock	discuss	mistrust	disobey	inside	impure	prefix	63
displease	prepare	exchange	enlist	enclose	improve	explain	70
preheat	explore	invest	express	depart	reread	uneven	77
incorrect	uneasy	misspell	misprint	recheck	impolite	impress	84
dishonest	enlarge	disown	unlike	misuse	replant	unhook	91

SA-8

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Prefixes and Suffixes

cautious	experiment	loudly	excuse	unwash	shortness	fearless	7
management	smoothen	report	healthy	expert	reuse	prefer	14
thirsty	disable	until	imprint	income	leadership	fifth	21
demand	mistreat	expert	vacation	thankful	increase	tricky	28
engrain	sixth	cupful	uncook	harmful	careful	kindness	35
helpless	impose	sinkable	deform	prejudge	marvelous	quickly	42
information	burnable	misstep	engulf	frighten	disorder	soften	49
readable	battleship	expert	engulf	demand	leadership	deform	56
sinkable	income	helpless	shortness	impose	until	misstep	63
tricky	disable	burnable	soften	kindness	experiment	report	70
vacation	healthy	report	frighten	cupful	cautious	disorder	77
readable	increase	fifth	sixth	quickly	smoothen	thirsty	84
expert	information	fearless	harmful	uncook	battleship	loudly	91

SA-9

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Suffix Meanings*

Write in the suffix that completes the word for each sentence.

ment ion ship ful y en less able ous th ly ness

The little girl had to take a spoon____ of the medicine. The watch dog will not bite you, he is harm____. 7
Mary took her car to the garage for inspect____. The flashlight brightened the dark____. She walked 14
soft____ so she would not wake the baby. The joke was very humor____. He was going to the doctor for 19
treat____. She wanted to straight____ her curly hair. Sue is very friendly, she is like____. The 29
woman had not slept well, she was sleep____. The two children had a strong friend____. David was in 34
the four____ grade. The winding road was very danger____. The lost puppy was home____. The china 41
dish was break____. Patti glad____ went to the store for her mother. Her toothache was very pain____. 48
The ship____ arrived on air freight. The select____ of dresses at the shop was very good. The couple 55
celebrated their ten____ anniversary. All of the furniture was dust____. She was granted member____ in 61
the club. We thanked her for her kind____. We pulled the shade to dark____ the room. The baby 69
missed its nap and was crank____. Her grandmother was sweet and love____. Bob was nerv____ about the 75
final exam. All of the eigh____ grade went to the concert. His father owned a car dealer____. 78
Soon after the concrete is poured, it will hard____. Kathy was treated cruel____ by the other children. 81
The teacher expected perfect____ from his students. Steve was thank____ for all of his birthday gifts. 87
There was much sad____ among the family when their pet ran away. In space the astronauts are weight____. 95
The family gets a lot of enjoy____ out of doing things together. His college graduation was a joy____ 102
occasion. That material is wash____. My mother puts bleach in the wash to bright____ the clothes. 108

SA-10

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Prefix Meanings*

Write in the prefix that completes the word in each sentence.

mis in ex re dis im en de un pre

Marion was not friendly. She was ____friendly. Sam worked the problem wrong. He made a ____take. 5
If you move the plant across the yard, you ____plant it. I need to ____connect the TV before repairing it. 10
If you go faster than the speed limit you ____ceed it. The young girl was rude to her mother. She was 12
____polite. It was raining outside so the children played ____doors. If a train goes off the track, it 16
____rails. Bob decided he would join the army. He was going to ____list. I always ____spell that 23
word. It is so messy I will ____write it. My mother was not happy with me. She was ____pleased. 28
My mother is going to take everything out of the refrigerator so she can ____frost it. I will turn the 30
oven on before I need it so it can ____heat. The teacher thinks that Bob's handwriting will ____prove with 35
practice. My mother ____joys reading a good book. Please ____lock the door so I can come inside. She 39
gave the teacher an ____correct answer. Your teacher will ____plain how to work the problem. I will 43
____pare dinner for my friends tonight. If you do not understand, you ____understand. The man is going 49
to add a room so he can ____large his home. Joe's war wounds ____abled him. The two girls are different 54
so they are ____like each other. The children wanted to ____plore the old house. When you start a new 58
paragraph you must ____dent it. The young boy is very reliable and you can ____pend on him. John thought 62
the math problem was ____possible to do. The teacher made a mistake on scoring Debbie's paper so she will 64
____check it. If you beforehand then you ____pay. If you lay something in the wrong place, you ____lay 72
it. If you ____claim, you cry out. The man was not agreeable, he was ____agreeable. Max felt very ____lucky 79
when he lost his gold coin. After she ____turns from the grocery store we can make dinner. 81

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SA-11

see-say
see-write

Contractions

Say or write the correct contraction for each set of words.

they are	I am	that will	had not	we would	they have	would not
are not	will not	it will	you are	he would	did not	let us
she would	can not	I had	you will	that is	could not	it would
we have	have not	has not	she is	was not	he will	I will
is not	she will	I have	they will	do not	he is	it is
I would	should not	there is	they would	does not	you have	do not
they will	it is	she will	had not	let us	I have	can not
I had	is not	was not	did not	would not	he will	you are
does not	you will	that will	he would	they are	could not	will not
there is	I will	it would	we have	have not	they have	we would
it will	they would	are not	he is	she is	you have	has not
I am	should not	she would	I would	that is	are not	you are
that will	does not	she would	she will	that is	it will	they have

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SA-12

think-mark

Syllabication
Prefixes & Suffixes

retire	unsafe	hacking	promptly	compact	intend	thankful	entrap	8
unfair	painless	twisted	badly	distrust	deform	badly	biggest	16
compound	reread	describe	rewrite	useful	winless	inside	invent	24
swiftly	invent	depart	shooting	express	planted	misprint	dislike	32
export	countless	healthful	useful	coldest	unsolved	compare	kindness	40
compare	drifted	entire	repair	greenest	useless	misfit	talking	48
misfit	senseless	golden	renew	quickly	dissolve	exchange	depress	56
sharpness	unlike	spoonful	expand	compile	softly	excuse	joyful	64
harden	breakable	untie	replay	gladly	displease	invite	likable	72
helpful	repack	decrease	unfair	talking	timely	transfer	goodness	80
misquote	softly	reread	twisted	invite	winless	healthful	export	88
countless	misfit	talking	unfold	badly	spoonful	unsolved	retire	96
drifted	dislike	golden	distrust	retire	unsafe	hacking	unfair	104

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
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think-mark

SA-13

Syllabication
vc/cv

flatten	harbor	manner	command	jacket	signal	number	ledger	8
sudden	splendid	fifteen	suggest	harvest	copper	pudding	rubbage	16
pepper	silver	finger	office	baggage	bottom	mustard	thunder	24
picnic	master	shelter	offer	kidnap	upper	chapter	dictate	32
shabby	mistake	butter	cabbage	hammer	holler	happy	timber	40
flutter	chimney	slapping	lanterns	cellar	plaster	basket	collect	48
dentist	picture	pencil	goblin	princess	pilgrim	Kansas	magnet	56
blanket	circus	monkey	button	walnut	party	bottom	yellow	64
donkey	curtain	upper	better	suffer	ribbon	pillow	cottage	72
pepper	thunder	lanterns	harbor	fifteen	copper	jacket	command	80
splendid	office	signal	cellar	mistake	plaster	shabby	flatten	88
lumpy	suggest	purpose	shelter	harvest	manner	pudding	hollow	96
number	picnic	mustard	collect	basket	pepper	flatten	harbor	104

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
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SA-14

think-mark

Syllabication
v/cv vc/v

moment	polite	magic	travel	damage	finish	second	promise	8
Friday	medal	pilot	David	radar	lemon	hotel	tumble	16
manage	timid	tiger	dragon	pupil	future	magic	broken	24
begin	never	pirate	cabin	siren	honest	wagon	label	32
habit	punish	river	melon	duty	nature	statue	meter	40
final	robin	tonic	cozy	paper	music	dragon	palace	48
lady	model	clever	famous	frozen	figure	pedal	spider	56
lilac	broken	cabin	shadow	secret	finish	cedar	honor	64
bonus	stomach	silent	medal	tulip	local	spirit	human	72
level	paper	future	razor	lemon	basic	polite	second	80
siren	begin	robin	duty	pilot	radar	dragon	honest	88
pirate	nature	bonus	finish	damage	hotel	duty	punish	96
tumble	music	tiger	palace	promise	pupil	moment	polite	104

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ORANGE COUNTY PUBLIC SCHOOLS
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think-mark

SA-15

Syllabication
"le"

ladle	needle	beetle	bundle	poodle	tattle	settle	rumble	8
stumble	tremble	temple	ripple	maple	rumple	rattle	pickle	16
startle	dimple	sprinkle	treble	riddle	crumble	purple	cradle	24
giggle	cattle	shuttle	whistle	stubble	kettle	maple	eagle	32
griddle	grumble	circle	rubble	middle	tumble	trundle	fiddle	40
bubble	people	saddle	crackle	simple	puddle	thistle	wiggle	48
crinkle	throttle	tickle	pebble	turtle	puzzle	scramble	gentle	56
maple	grumble	poodle	apple	thimble	marble	ribbon	fumble	64
sprinkle	cattle	bundle	kettle	poodle	fiddle	crinkle	pickle	72
tumble	rumple	shuttle	settle	beetle	crackle	simple	waddle	80
stumble	tremble	rattle	rubble	eagle	dribble	paddle	giggle	88
bubble	temple	rumble	treble	purple	trundle	ripple	startle	96
puddle	grumble	tattle	stubble	rattle	maple	ladle	needle	104

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ORANGE COUNTY PUBLIC SCHOOLS
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think-mark

SA-16

Syllabication
cv/vc v/c cv/c

open	giant	diet	radio	unit	quiet	graduate	poem	8
lion	violin	giant	hyena	period	create	rodeo	Ohio	16
science	idea	denial	radiator	fluid	trial	electric	realize	24
ocean	annual	theater	gasoline	alive	poet	eternal	pioneer	32
dial	agree	uniform	usual	polio	telephone	against	ruin	40
rodeo	ahead	Canada	monument	duet	gelatin	ideal	riot	48
above	president	melody	hesitate	Indian	violin	above	president	56
melody	giant	lion	rodeo	above	radio	poet	science	64
trial	riot	open	violets	radio	create	ocean	ruin	72
duet	gelatin	pioneer	denial	cruel	poet	electric	quiet	80
unit	theater	Indian	idea	polio	above	uniform	duet	88
radiator	Ohio	open	melody	dial	violin	giant	eternal	96
alive	telephone	annual	agree	Canada	ahead	alive	gasoline	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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think-mark

Syllabication
Mastery

SA-17

mistake	velvet	hotel	finish	idle	poet	ideal	longer	8
formation	unlikely	temple	later	finish	allow	model	ribbon	16
cucumber	frozen	unsolved	diet	invitation	tiger	table	powder	24
depart	volcano	dimple	gorilla	revolt	radar	alike	duet	32
uneven	kindness	banner	dragon	lilac	violet	barbecue	tunnel	40
blanket	unfed	timid	people	alarm	buffulo	radio	China	48
twisted	ripple	vacation	open	elephant	final	disarm	furnish	56
crackle	lemon	idea	trial	inventor	lantern	greenest	pirate	64
temple	rodeo	shuttle	expensive	gladly	correct	never	broken	72
ruin	science	unit	furniture	tattle	signal	supper	exchange	80
pilot	ocean	annual	decay	ambulance	music	senseless	realize	88
electric	above	cannibal	traffic	melody	hesitate	confess	damage	96
shadow	department	punish	decay	palace	hesitate	mistake	velvet	104

ORANGE COUNTY PUBLIC SCHOOLS
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see-say

Mastery

SA-18

doesn't	cleans	replant	easier	chimneys	cowboy	helpful	there's	8
skating	sweeter	nervous	caps	rainbow	haven't	eighth	winning	16
uneven	slimmer	crosses	chalkboard	they've	thankful	thinnest	dishonest	24
toys	finest	basketball	couldn't	treatment	it's	wider	explore	32
you'll	sidewalk	wagged	pianos	trees	whiter	selection	defrost	40
don't	tonight	ripest	stairway	cheerless	hasn't	impure	pressed	48
waxes	churches	dishpan	incorrect	pennies	he's	jokes	brushes	56
mistrust	lovable	can't	boathouse	happier	enlarge	straighten	he'll	64
misses	closed	wolves	thinner	schoolhouse	misuse	they're	calves	72
trotting	neatest	hardship	we've	windiest	flashlight	prevent	let's	80
lilies	fishes	prettiest	purer	dusty	I'd	babies	driving	88
crazier	cruely	saved	waving	copies	something	cranky	clubhouse	96
darkness	it'll	windmill	humorous	impossible	tricky	cleans	easier	104

VOCABULARY DEVELOPMENT

Dolch Words

Preprimer
Unit 1
Unit 2

Primer
Unit 1
Unit 2

Grade 1
Unit 1
Unit 2

Grade 2
Unit 1
Unit 2

Grade 3
Unit 1
Unit 2

Dolch Phrases

Unit 1
Unit 2
Unit 3
Unit 4
Unit 5

Dolch Stories

Primer
Grade 2
Mastery - All Dolch 220 words

ORANGE COUNTY PUBLIC SCHOOLS
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Dolch Preprimer
Unit 1

run	big	to	look	we	three	me	a	can	*9*
down	and	help	my	away	for	it	one	in	*18*
said	here	we	to	look	in	for	big	my	*27*
and	one	it	me	away	run	here	said	can	*36*
three	help	down	a	for	we	my	and	look	*45*
one	can	help	to	run	me	three	it	down	*54*
away	here	big	in	to	said	we	look	three	*63*
run	for	can	one	down	my	said	big	it	*72*
a	away	me	and	help	in	here	a	said	*81*
to	look	for	big	we	and	a	it	three	*90*
away	in	one	my	run	can	me	help	here	*99*
down	three	run	look	down	away	help	and	me	*108*
we	to	here	one	my	in	can	it	big	*117*

ORANGE COUNTY PUBLIC SCHOOLS
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Dolch Preprimer
Unit 2

little	where	go	not	red	funny	is	make	the	9
I	blue	find	come	you	up	two	yellow	play	18
jump	see	where	you	play	yellow	red	blue	make	27
the	find	come	funny	little	is	see	go	where	36
not	I	up	two	play	make	up	red	find	45
the	funny	two	jump	I	little	you	yellow	go	54
blue	where	see	come	not	the	make	blue	funny	63
come	is	play	two	is	not	jump	yellow	find	72
you	where	up	see	red	I	little	go	see	81
jump	yellow	is	two	the	find	play	jump	where	90
up	blue	come	not	red	little	you	make	I	99
go	funny	where	come	is	funny	go	red	yellow	108
see	jump	two	not	find	play	up	make	blue	117

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ORANGE COUNTY PUBLIC SCHOOLS
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Dolch Primer
Unit 1

pretty	am	new	yes	well	but	no	so	saw	9
at	do	must	they	black	ate	have	want	our	18
say	are	he	please	soon	must	went	on	good	27
so	he	please	black	are	good	have	but	want	36
soon	pretty	our	well	at	they	am	ate	do	45
yes	new	say	went	on	saw	no	new	no	54
must	he	our	good	have	say	am	so	they	63
are	at	please	want	yes	pretty	ate	do	soon	72
black	on	saw	but	went	well	ate	so	want	81
am	at	are	well	must	saw	please	pretty	soon	90
have	but	do	good	went	on	black	new	say	99
our	yes	no	they	he	are	soon	good	so	108
have	but	no	pretty	do	well	must	new	on	117

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

Dolch Primer
Unit 2

into	now	brown	he	this	did	eat	who	ran	9
came	cut	with	all	that	four	under	too	she	18
there	was	get	ride	white	like	what	now	did	27
she	under	into	ride	that	be	came	white	there	36
with	eat	all	what	get	who	brown	this	was	45
too	four	like	ran	out	eat	ride	be	under	54
came	who	brown	all	get	did	this	into	what	63
white	now	she	was	four	there	that	with	like	72
too	ran	out	with	four	all	was	like	there	81
now	under	be	ride	eat	white	what	this	ran	90
she	into	that	who	get	did	came	brown	too	99
into	under	came	eat	ran	out	now	she	white	108
who	all	be	did	there	that	brown	ride	get	117

ORANGE COUNTY PUBLIC SCHOOLS
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Dolch
Grade 1 - Unit 1

them	open	his	when	old	any	stop	had	let	9
him	think	had	fly	just	some	an	has	her	18
ask	may	his	some	think	them	has	her	ask	27
open	may	fly	let	when	old	him	had	just	36
stop	an	had	any	open	when	stop	ask	them	45
some	him	may	her	had	just	has	had	any	54
think	fly	an	old	his	let	an	old	his	63
them	had	when	her	may	think	some	has	had	72
just	him	any	stop	let	ask	open	fly	stop	81
had	when	them	an	has	think	his	her	open	90
let	ask	any	may	him	just	some	had	old	99
fly	his	old	an	let	him	think	ask	when	108
had	them	has	just	open	may	stop	had	them	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

Dolch
Grade 1 - Unit 2

put	of	give	from	were	take	over	once	after	9
could	by	round	then	every	walk	know	how	again	18
as	thank	from	then	walk	of	know	take	how	27
put	could	round	over	after	once	by	again	were	36
as	every	give	every	put	over	give	round	thank	45
once	how	by	were	as	know	of	after	then	54
from	again	take	walk	could	thank	by	again	as	63
walk	give	round	of	take	then	over	could	were	72
how	put	from	every	once	after	know	after	then	81
every	walk	put	thank	over	were	again	take	round	90
once	by	as	could	from	how	of	give	know	99
of	every	after	once	then	give	put	know	walk	108
again	take	as	were	by	round	over	from	how	117

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

Dolch
Grade 2 - Unit 1

sit	goes	tell	which	both	read	wash	sleep	right	9
wish	green	fast	upon	best	write	cold	its	gave	18
five	don't	been	call	sing	been	goes	five	which	27
upon	sleep	right	gave	read	wash	wish	cold	tell	36
both	write	don't	sing	call	upon	best	green	its	45
sit	goes	call	five	green	sit	read	sleep	goes	54
cold	wash	wish	tell	best	don't	gave	been	which	63
both	sing	fast	right	fast	its	tell	best	cold	72
right	call	green	fast	upon	don't	its	been	goes	81
five	sleep	both	wash	which	read	gave	sit	wish	90
sing	write	fast	call	right	cold	upon	gave	don't	99
read	which	both	five	been	green	wish	best	write	108
sit	both	read	wash	right	wish	green	write	cold	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

Dolch
Grade 2 - Unit 2

those	first	or	made	make	pound	us	work	pull	9
because	would	these	off	your	why	around	always	very	18
does	buy	before	use	their	your	these	us	always	27
why	around	because	many	off	made	does	found	buy	36
pull	or	would	those	before	their	very	use	first	45
work	made	use	first	us	buy	pull	found	their	54
your	these	always	work	would	or	many	does	off	63
before	those	why	around	very	because	off	found	your	72
would	or	does	work	their	made	buy	pull	always	81
use	us	because	these	before	around	many	first	why	90
those	very	many	these	found	those	buy	first	before	99
because	does	use	around	pull	very	would	made	us	108
why	their	always	work	off	your	or	buy	many	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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Dolch
Grade 3 - Unit 1

only	pick	grow	done	hold	better	try	fall	small	9
if	drink	six	far	much	own	light	ten	hot	18
seven	got	never	only	seven	six	own	better	grow	27
small	done	far	never	fall	light	pick	drink	much	36
if	ten	try	got	hot	hold	if	own	got	45
pick	done	grow	drink	much	light	only	hold	small	54
seven	never	better	try	far	fall	ten	six	hot	63
try	got	only	grow	pick	done	never	hold	drink	72
hot	own	seven	six	ten	much	fall	far	if	81
light	better	small	never	got	try	ten	small	only	90
hot	pick	better	hold	grow	if	done	own	drink	99
much	light	six	seven	far	fall	own	try	pick	108
hold	much	better	seven	six	drink	done	far	better	117

835

836

ORANGE COUNTY PUBLIC SCHOOLS
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ORLANDO, FLORIDA

Dolch
Grade 3 - Unit 2

myself	long	draw	carry	eight	warm	out	laugh	show	9
hurt	keep	together	shall	own	bring	full	today	start	18
clean	kind	about	long	draw	warm	keep	kind	about	27
bring	today	carry	shall	own	hurt	eight	laugh	out	36
myself	together	full	start	show	clean	warm	myself	today	45
laugh	keep	own	about	shall	long	show	start	together	54
clean	kind	hurt	out	draw	full	bring	eight	carry	63
out	myself	draw	keep	start	eight	clean	kind	bring	72
show	hurt	together	about	long	carry	own	today	warm	81
shall	laugh	full	about	out	kind	together	clean	laugh	90
hurt	warm	long	myself	keep	carry	start	bring	own	99
today	draw	full	shall	show	eight	hurt	laugh	carry	108
draw	full	kind	own	show	myself	keep	long	own	117

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Dolch Phrases
Unit 1

can run	they are	will think	went away	he was	was made	went down	14
is coming	could eat	must be	my father	her mother	I was	I am	28
from home	has made	some bread	was found	will walk	you were	at school	42
we were	to stop	it is	will go	would like	to go	some bread	56
I was	is coming	will walk	went away	at school	you were	will go	70
must be	could eat	to stop	was found	from home	was made	they are	84
with us	my father	will think	I am	we were	would eat	can run	98
went down	to go	it is	her mother	has made	he was	will walk	112
will go	he was	to stop	I am	it is	went away	was found	126
would like	her mother	they are	we were	from home	can run	has made	140
went down	to go	at school	with us	some bread	I was	could eat	154
you were	my father	will think	must be	was made	is coming	went down	168
will go	her mother	with us	at school	could eat	I am	will think	182

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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Dolch Phrases
Unit 2

is going	can fly	so long	has found	his sister	could make	up there	14
so much	at three	can play	too soon	my brother	will buy	your sister	28
for them	about it	some cake	they were	a home	at once	down there	42
for him	her father	all day	can live	will look	would want	will look	56
too soon	a home	your sister	they were	some cake	down there	all day	70
for them	at three	can play	my brother	can live	about it	so long	84
will buy	is going	can fly	up there	so much	at once	could make	98
has found	for him	her father	would want	can play	at once	my brother	112
about it	can fly	at three	up there	her father	will look	down there	126
some cake	can live	his sister	has found	for them	could make	a home	140
is going	so much	for him	would want	will buy	all day	so long	154
they were	your sister	too soon	can fly	can play	at three	down there	168
will buy	is going	would want	up there	so much	for them	some cake	182

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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Dolch Phrases
Unit 3

you will like	down here	will read	a pretty picture	about him	12
when I can	with more	if I may	for the baby	if you can	26
you are	must go	too little	it was	on the floor	37
on the chair	we are	his brother	what I want	your mother	49
he is	by the house	all night	the old men	did not go	62
down the hill	he would do	for the baby	about him	he is	75
on the floor	when I can	must go	what I want	on the chair	89
a pretty picture	we are	you will like	it was	all night	101
your mother	did not go	his brother	by the house	will read	113
you are	the old men	down here	he would do	down the hill	126
if I may	too little	with more	if you can	for the baby	139
all night	if I may	you will like	it was	the old men	152
what I want	with more	down here	if you can	you are	164

ORANGE COUNTY PUBLIC SCHOOLS
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Dolch Phrases
Unit 4

in the box	as I said	has run away	the little children	12
the new coat	a new book	the old man	the yellow cat	24
in the grass	by the tree	a pretty home	the small boy	36
a big horse	the black bird	the white sheep	to the nest	48
you will do	in the garden	when I wish	I may go	60
the black horse	the yellow ball	to the barn	to the school	72
for the girl	the red apple	a new hat	you will do	84
the red apple	the yellow cat	the old man	the black bird	96
the yellow ball	in the grass	to the nest	to the barn	108
in the box	as I said	a new book	a new hat	120
in the garden	a pretty home	has run away	the small boy	132
the black horse	by the tree	for the girl	the little children	144
to the school	the new coat	a big horse	the white sheep	156

ORANGE COUNTY PUBLIC SCHOOLS
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Dolch Phrases
Unit 5

I will come	as he did	if you wish	the new doll	12
to the house	as he said	a big house	in the window	24
the little chickens	when you know	the red cow	down the street	36
when you come	what I say	in the barn	he would try	48
to the farm	I may get	from the tree	in the water	60
the little pig	if I must	has come back	from the farm	72
the little dog	as I do	the white duck	the small boat	84
the funny man	then he came	did not fall	I will come	96
has come back	he would try	from the tree	in the water	108
the new doll	when you come	as I do	when you know	120
to the house	from the farm	to the farm	in the window	132
in the barn	I may get	as he said	did not fall	144
the red cow	as he did	a big house	what I say	156

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

Dolch Stories
Primer

THE SEE-SAW

Jane was going to the store. She went down the street. 11
She saw a boy and a little dog. 19
The boy said, "Come and play with me. You may play with 31
my dog." 33
Jane said, "I will play with you. What can the dog do? 45
He is not very big." 50
He is a good dog," said the boy. "He can run and jump. 63
And he can ride a see-saw." 70
Oh, I want to see him ride," said Jane. "Where is it?" 82
"I have it in here," the boy said. 90
He said to the dog. "Go find the see-saw. We will 102
have a ride." 105
The dog ran to the see-saw. 112
"Do you like to ride?" said the boy. "Say 'yes'." 122
The dog said, "Bow-wow!" 127
"Look at this," said the boy. "I am up and he is down. 140
He is up and I am down." 147
"What a funny ride for a dog!" said Jane. 156
"Did you ever see a dog ride a see-saw? 166

Dolch Stories
Grade 2

CAMPING OUT

Some boys went camping. They were going to sleep in a 11
brown tent. They put it up by a tree. Two of the boys went 25
into the tent to make the beds. They had put up the tent too 39
fast, and it soon came down on them. The boys were under it. 52
They could not get out. The other boys began to laugh. The 64
boys began to call, "Help, Help! Stop laughing and give us 75
some help! This is no fun!" 81

After the tent was up, they made the beds. Then they 92
all went for a walk. There were so many pretty flowers 103
they picked some to take home. The flowers were red and blue 115
and white. They saw some green and black berries, but they 126
were not good to eat. They saw an old woman. One of the boys 140
gave his flowers to her. She was very pleased at that. She 152
said to him, "Thank you for your flowers." 160

After supper, one boy said, "Who has to do the dishes while 172
we are away from home?" 177

"We will all do dishes now," said another boy. 186

"Yes, and then we will read and sing until bedtime." 196

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

Dolch Stories
Dolch 220

THE BEST THING IN THE WORLD

Once upon a time there were four brothers who lived in 11
a far away land. Their father was an old king. One day he 24
said, "I will not live long now. Today you must start out 36
into the world. In a year, bring back the thing you have 48
found. The one who can pick the best thing shall be the new 61
king." 62

The first brother said, "I will look in every city or 73
town. I will buy the best thing I can find for my father." 86

The next two brothers said, "We will both go on fast 97
ships over the sea. We will find something better." 106

The last brother said, "I am going to ask the people here 118
in our own land to tell me the best thing." The other three 131
began to laugh. 134

"Then you will never be king!" they said. 142

The last brother started off. When he had gone about six 153
miles, he met a man. 158

"What do you carry in those big bags?" he asked. 168

"The best thing in the world," said the man. "Those are 179
full of the good nuts which fall from my five nut trees." 191

"I don't think that would work," said the brother to himself. 202
"I must try again." 206

The brother went on another seven miles. He found a small 217
brown bird. It had been hurt so he put it in his coat where it 232
could keep warm. As he went on, he saw a little girl crying. 245
He ran to meet her. 250

"Why are you crying?" he asked. 256

"I want to get some water from the well," she said. "We 268
use so much. We drink cold water. We wash the clothes clean 280
with hot water. But I do not know how to pull it up. Please 294
show me." 296

The brother said, "Hold this bird, and I will help you. It 308
does not fly around anymore because it got its wing cut." 319

"Thank you. What a pretty bird!" she said. "I wish you 330
would give it to me. If you will let me keep it I will always 345
be very kind to it. I will take care of it myself. I will make 360
it grow well again." 364

"Yes, you may have it," said the brother. So he gave her 376
the bird and went on. 381

At night, he went to sleep under a round yellow hay stack. 393
When it was light again he walked on. Everyday he would walk 405
eight or ten miles. He asked the people about the best thing 417
in the world. Some said it was best to sing. Some said it was 431
best to run and jump and play. Some said the green grass was 444
best. Some liked the red and blue and white flowers best. One 456
man said the best thing was to ride a black horse. 467

He always stopped to help people who needed it. Soon 477
he made many friends. All the people began to like him. They 489
would say, "See, there goes the king's son. He would be just 501
the right kind of a king for us." 509

Every door was open to him. The people would call to him 521
to stop. They would ask him to come and eat with them. After 534
he ate, he would sit down and read to the children. After he 547
read, he showed them how to draw and write. 556

Months went by. He still had no beautiful thing to take 567
to his father. Just before the year was done he went home again. 580
The time came when the king called his sons together. 590

"What did you bring?" he asked. 596

The other brothers had many beaufiful things. 603

"And what do you bring?" said the king to the last brother. 615

"This is too funny!" said the other brothers. "He has 625
nothing." 626

"I bring only the friendship of your people," said the 636
last brother. 638

"And that is the best thing!" cried his father. "You shall 649
be the new king." 653

VOCABULARY DEVELOPMENT

Common Sign & Label Words

Unit 1

Unit 2

Unit 3

Unit 4

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

Common Signs & Label Words
Unit 1

see-say

Dont' Walk	Lost	In	Stop	Keep Off	Closed	Walk	9
Keep Out	Open	Look	Out	Men	Down	Help	17
Listen	Look	Help	Don't Walk	Out	Lost	In	25
Keep Off	Walk	Closed	Stop	Listen	Men	Open	33
Down	Keep Out	Open	Listen	Out	Closed	Listen	41
Stop	In	Keep Off	Walk	Down	Lost	Help	49
Men	Don't Walk	Look	Down	Keep Off	Help	Stop	58
Walk	Look	Open	Out	Don't Walk	Lost	Keep Out	67
In	Closed	Keep Out	Men	Keep Off	Don't Walk	Help	77
Out	In	Closed	Men	Down	Walk	Look	84
Stop	Keep Out	Open	Lost	Listen	Don't Walk	Open	93
Men	Help	Walk	Keep Off	In	Closed	Listen	101
Look	Down	Out	Lost	Stop	Keep Out	Keep Off	110

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Common Signs & Label Words
Unit 2

Doctor	Poison	Police	Telephone	Quiet	5
Step-Up	Ladies	Step-Down	Restrooms	Keep Away	13
Pull-Push	Keep Off The Grass	Bus Stop	Airport	Danger	23
Poison	Restrooms	Keep Away	Keep Off The Grass	Doctor	32
Police	Ladies	Step-Up	Danger	Airport	38
Step-Down	Bus Stop	Pull-Push	Quiet	Telephone	46
Pull-Push	Poison	Bus Stop	Telephone	Airport	53
Quiet	Danger	Police	Step-Up	Restrooms	59
Doctor	Step-Down	Ladies	Keep Off The Grass	Keep Away	69
Telephone	Airport	Quiet	Doctor	Ladies	74
Police	Keep Away	Danger	Poison	Restrooms	80
Step-Down	Keep Off The Grass	Pull-Push	Step-Up	Ladies	91
Doctor	Bus Stop	Step-Down	Keep Off The Grass	Keep Away	102

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Common Signs & Label Words
Unit 3

First Aid	U.S. Mail	Out Of Order	Office	Fire Escape	10
No Diving	Keep-Right	Fire Alarm	No Swimming	Do Not Enter	22
Warning	Watch Your Step	Hospital	Police Station	Exit	30
No Diving	Keep-Left	Fire Escape	Watch Your Step	Warning	41
Do Not Enter	Police Station	No Swimming	Exit	U.S. Mail	51
Out Of Order	Fire Alarm	Hospital	First Aid	Office	60
Warning	Office	Do Not Enter	Police Station	Fire Escape	69
Keep-Right	Hospital	U.S. Mail	No Swimming	Watch Your Step	80
Out Of Order	Exit	No Diving	First Aid	Fire Alarm	90
Warning	Office	Fire Alarm	First Aid	U.S. Mail	98
Police Station	Fire Escape	Keep-Left	Exit	Do Not Enter	109
No Swimming	Hospital	Out Of Order	No Diving	Watch Your Step	120
Exit	Office	U.S. Mail	Fire Escape	Fire Alarm	128

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-say

Common Signs & Label Words
Unit 4

Caution	Elevator	Fire Extinguisher	Gasoline	Flammable	6
Private	Entrance	Warning	Instruction	Exit	11
Emergency	Contaminated	Poisonous	No Trespassing	Information	17
Warning	Exit	Information	Flammable	Elevator	22
Contaminated	Poisonous	Instruction	Gasoline	No Trespassing	28
Fire Extinguisher	Caution	Emergency	Entrance	Private	34
Emergency	Flammable	Information	Entrance	Fire Extinguisher	40
Private	Exit	Gasoline	Elevator	Instruction	45
Warning	Poisonous	Caution	Contaminated	No Trespassing	51
Contaminated	Gasoline	Elevator	Flammable	Exit	56
Warning	Caution	Emergency	Instruction	Private	61
No Trespassing	Information	Fire Extinguisher	Entrance	Caution	68
Gasoline	Instruction	No Trespassing	Warning	Poisonous	74

VOCABULARY DEVELOPMENT

State Assessment - Grade 3

Unit 1
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Unit 12
Unit 13
Unit 14

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 1

baby	game	lamb	back	cake	wagon	a	had	yard	9
calf	dark	made	each	of	about	paint	tail	said	18
I	rabbit	kitten	funny	jump	uncle	name	yard	I	27
lamb	about	cake	of	a	tail	name	wagon	calf	36
back	game	paint	jump	dark	baby	kitten	made	funny	45
each	rabbit	said	uncle	had	funny	said	made	a	54
calf	tail	I	jump	baby	kitten	game	about	cake	63
of	back	dark	had	rabbit	each	wagon	paint	yard	72
lamb	name	uncle	tail	cake	about	said	jump	calf	81
uncle	rabbit	funny	had	of	dark	kitten	game	baby	90
I	wagon	each	paint	lamb	name	back	yard	made	99
baby	game	lamb	back	cake	wagon	a	had	yard	108
calf	dark	made	each	of	about	tail	said	I	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 2

just	did	make	walk	know	rain	parade	far	near	9
sang	after	eat	under	farm	call	egg	hand	bag	18
off	day	take	gave	year	garden	last	walk	rain	27
hand	just	know	sang	under	farm	bag	off	gave	36
near	after	egg	garden	make	did	call	year	parade	45
day	last	take	eat	far	sang	call	gave	bag	54
after	know	farm	year	last	did	rain	just	under	63
day	eat	egg	off	walk	far	garden	near	make	72
parade	take	far	walk	gave	egg	did	eat	near	81
make	day	call	bag	sang	last	after	hand	off	90
take	farm	rain	just	know	garden	year	under	parade	99
last	off	did	year	eat	near	call	rain	egg	108
gave	take	hand	know	make	under	sang	bag	just	117

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 3

happy	every	if	fast	many	do	laugh	man	nest	9
never	talk	yellow	up	want	came	hard	let	ice	18
again	get	ran	sat	park	oh	ball	every	man	27
came	if	sat	park	let	hard	ice	happy	laugh	36
oh	nest	ball	up	talk	yellow	never	want	get	45
again	do	fast	ran	many	fast	talk	let	park	54
happy	ice	up	never	ran	sat	nest	hard	again	63
do	man	many	if	want	ball	get	laugh	yellow	72
came	oh	every	never	ice	talk	want	yellow	let	81
park	if	oh	ball	came	ran	up	man	every	90
again	sat	fast	do	happy	nest	get	many	laugh	99
hard	let	yellow	do	ball	want	man	park	talk	108
oh	every	ice	fast	many	never	again	came	ran	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 4

us	saw	very	peanuts	does	zoo	has	yes	barn	9
school	on	may	in	ready	letter	read	all	can	18
father	party	old	new	girl	tell	was	father	new	27
may	yes	party	tell	very	barn	letter	old	peanuts	36
girl	on	us	can	in	has	all	was	zoo	45
school	ready	saw	read	does	ready	letter	all	saw	54
school	yes	us	has	tell	peanuts	was	in	may	63
on	does	party	new	old	can	father	read	girl	72
zoo	very	barn	may	on	saw	old	zoo	can	81
can	read	party	father	school	letter	does	peanuts	all	90
new	in	very	ready	girl	was	yes	barn	tell	99
us	has	girl	party	was	very	yes	zoo	us	108
new	school	in	may	tell	saw	does	read	all	117

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 5

be	see	you	thank	give	am	me	dog	feet	9
your	way	doll	once	car	basket	than	alone	is	18
light	cat	next	water	red	hat	penny	way	next	27
car	doll	cat	than	basket	light	me	is	your	36
red	thank	dog	be	see	penny	am	give	you	45
once	water	hat	feet	alone	cat	give	see	doll	54
feet	dog	penny	hat	be	red	me	once	water	63
than	your	way	is	alone	next	light	thank	basket	72
car	am	you	than	see	dog	basket	cat	give	81
is	thank	car	hat	your	penny	me	water	next	90
you	way	doll	red	once	be	feet	am	light	99
alone	see	car	doll	water	is	am	hat	way	108
you	than	basket	feet	dog	cat	penny	light	be	117

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 6

catch	she	people	ride	like	that	door	bear	men	9
night	glad	fine	go	no	or	it	find	an	18
little	we	met	one	pet	he	have	night	catch	27
she	no	people	door	pet	little	have	go	met	36
find	bear	he	ride	an	that	we	it	one	45
glad	or	like	fine	men	we	an	one	or	54
like	it	she	pet	men	fine	he	met	catch	63
glad	find	night	people	no	door	bear	that	go	73
have	ride	little	men	door	go	one	find	bear	81
ride	have	he	like	or	people	fine	pet	little	90
we	catch	glad	that	met	she	night	no	an	99
ride	one	it	find	he	or	glad	we	pet	108
that	night	no	have	an	catch	go	bear	met	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 7

were	animal	live	goat	dress	children	road	their	goat	9
down	and	show	head	milk	picnic	bed	first	other	18
went	noise	shoe	right	bee	fire	the	right	their	27
children	bed	and	animal	milk	were	other	went	the	36
coat	noise	road	first	fire	live	picnic	head	goat	45
dress	down	bee	show	shoe	dress	animal	live	milk	54
bee	and	right	goat	the	their	other	went	coat	63
show	down	picnic	first	noise	shoe	road	fire	head	72
were	and	bed	coat	live	bee	shoe	noise	bed	81
fire	picnic	other	children	animal	down	goat	show	and	90
head	the	dress	were	right	road	milk	their	first	99
and	down	shoe	right	dress	first	head	milk	were	108
live	noise	road	animal	bee	went	children	their	bed	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 8

money	sing	wet	nose	before	fish	look	heard	pig	9
sit	room	gone	cold	good	any	picture	our	out	18
duck	hear	them	not	run	miss	long	look	good	27
our	cold	not	before	run	heard	money	them	room	36
fish	long	sing	out	pig	nose	wet	duck	picture	45
gone	sit	any	miss	hear	look	money	nose	pig	54
sit	long	miss	any	good	them	duck	not	before	63
run	hear	our	wet	out	gone	room	cold	fish	72
sing	picture	heard	sit	gone	out	them	duck	good	81
run	money	not	long	before	cold	look	pig	heard	90
sing	nose	wet	miss	fish	room	our	hear	picture	99
any	room	gone	out	heard	fish	duck	wet	our	108
not	money	sit	look	picture	cold	miss	them	any	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 9

over	began	more	got	grass	apple	are	when	color	9
sleep	there	lunch	snow	fit	what	lost	play	come	18
five	hello	now	help	behind	then	monkey	come	grass	27
snow	are	play	began	help	sleep	five	lost	there	36
hello	what	when	lunch	apple	more	fit	then	color	45
over	now	monkey	got	behind	began	snow	more	are	54
help	five	got	when	what	then	monkey	hello	come	63
fit	now	there	behind	sleep	over	lunch	lost	grass	72
play	apple	color	lost	help	five	then	over	sleep	81
color	now	play	monkey	come	there	behind	began	when	90
more	got	lunch	hello	are	snow	fit	apple	what	99
grass	sleep	color	there	play	come	got	then	monkey	108
behind	snow	five	began	more	now	are	lost	when	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 10

so	around	could	thing	hen	they	her	better	soon	9
mother	morning	cow	as	best	flower	these	green	pony	18
white	flew	some	where	please	ground	pocket	green	flower	27
around	soon	as	mother	could	some	flew	her	thing	36
pocket	best	hen	ground	so	these	please	white	morning	45
they	pony	where	better	cow	as	green	hen	ground	54
they	pocket	around	best	so	better	thing	flower	where	63
soon	her	flew	these	mother	as	morning	white	please	72
some	pony	hen	best	around	ground	white	thing	where	81
so	soon	flower	better	pocket	could	cow	they	mother	90
these	please	flew	her	morning	some	green	pony	as	99
could	where	best	hen	pocket	these	they	please	so	108
flew	soon	her	thing	white	some	cow	green	mother	117

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 11

prize	much	pretty	will	at	this	for	who	fly	*9*
ask	guess	here	spring	black	bird	found	squirrel	grow	*18*
think	cry	aunt	big	must	why	high	pretty	this	*27*
big	think	cry	at	much	must	bird	spring	here	*36*
prize	ask	why	guess	aunt	black	high	found	for	*45*
will	squirrel	grow	fly	who	here	big	found	at	*54*
for	will	high	fly	must	spring	black	why	prize	*63*
guess	ask	much	aunt	who	squirrel	pretty	this	cry	*72*
grow	think	bird	high	cry	fly	found	big	squirrel	*81*
pretty	who	bird	at	here	spring	grow	aunt	must	*90*
this	will	for	think	much	ask	why	black	guess	*99*
prize	why	guess	who	think	spring	much	squirrel	pretty	*108*
fly	grow	here	prize	bird	will	much	at	this	*117*

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 12

boat	three	hold	hill	frog	those	wish	him	puppy	9
away	time	window	blue	friend	my	stay	pull	with	18
book	two	four	step	stop	his	three	him	with	27
step	my	puppy	his	blue	frog	boat	time	hold	36
those	wish	stop	window	two	put	away	stay	hill	45
book	four	pull	friend	stay	pull	those	his	blue	54
puppy	put	boat	step	with	three	him	hill	window	63
wish	frog	hold	away	my	four	two	time	friend	72
stop	book	him	hold	two	stop	with	away	window	81
wish	puppy	stay	those	blue	frog	my	friend	hill	90
four	step	his	pull	boat	time	put	three	two	99
window	put	my	with	him	away	stay	pull	hill	108
stop	frog	wish	book	blue	boat	hold	three	frog	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 13

brown	work	but	took	home	sun	store	fun	word	9
street	box	train	from	woman	story	try	told	bring	18
to	honey	too	tree	twin	town	horse	twin	store	27
told	honey	box	train	from	try	to	work	bring	36
story	fun	woman	sun	too	town	brown	horse	took	45
boy	home	word	tree	street	took	from	word	to	54
street	horse	work	woman	home	try	tree	sun	boy	63
box	story	bring	too	town	brown	fun	honey	train	72
store	twin	told	to	town	brown	woman	try	took	81
horse	store	told	street	fun	box	from	work	twin	90
sun	tree	honey	boy	word	too	story	bring	train	99
bring	woman	word	took	street	store	told	from	too	108
twin	horse	boy	honey	train	try	fun	town	work	117

888 889

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 3
Unit 14

turtle	were	trick	buy	house	by	house	truck	how	*9*
but	hot	would	surprise	garden	peanuts	children	bus	laugh	*18*
hurry	animal	toy	flower	noise	basket	ice	but	house	*27*
truck	turtle	animal	flower	surprise	were	hot	ice	house	*36*
hurry	buy	noise	laugh	children	basket	toy	how	garden	*45*
peanuts	bus	would	by	trick	turtle	house	bus	children	*54*
hot	truck	peanuts	by	hurry	house	would	noise	how	*63*
basket	flower	toy	were	but	ice	laugh	animal	surprise	*72*
trick	buy	garden	ice	truck	turtle	hot	buy	animal	*81*
basket	by	were	garden	toy	would	hurry	house	flower	*90*
children	laugh	house	how	surprise	bus	but	trick	peanuts	*99*
noise	hurry	children	animal	ice	would	truck	basket	house	*108*
toy	garden	by	how	were	house	laugh	buy	but	*117*

VOCABULARY DEVELOPMENT

State Assessment - Grade 5

Unit 1
Unit 2
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Unit 33
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Unit 38
Unit 39
Unit 40

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 1

bad	race	vacation	machine	queen	eager	ladder	dad	able	9
sad	garage	wait	keep	ugly	table	sell	jar	pack	18
safe	face	cabin	hair	oak	nail	idea	vacation	dad	27
cabin	safe	race	garage	sad	sell	machine	eager	idea	36
ladder	table	keep	bad	face	able	hair	nail	ugly	45
wait	pack	oak	queen	jar	bad	table	able	pack	54
wait	jar	dad	eager	nail	garage	ugly	vacation	face	63
idea	ladder	sell	hair	machine	race	oak	sad	keep	72
safe	cabin	queen	keep	oak	race	machine	eager	safe	81
table	sad	garage	wait	bad	pack	sell	hair	able	90
face	dad	cabin	queen	ugly	ladder	nail	vacation	idea	99
jar	safe	wait	cabin	eager	race	oak	hair	queen	108
machine	table	vacation	jar	ugly	dad	able	nail	bad	117

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 2

jelly	damp	across	lady	fail	valley	eagle	ill	half	9
above	cage	bake	gas	sale	narrow	radio	question	tall	18
sail	mad	wake	page	ocean	until	key	cage	damp	27
question	wake	fail	eagle	valley	gas	until	sale	page	36
jelly	ocean	above	sail	key	ill	radio	bake	half	45
tall	mad	narrow	across	lady	until	jelly	half	valley	54
narrow	bake	page	across	cage	lady	ill	fail	sale	63
damp	wake	tall	question	radio	ocean	above	eagle	key	72
gas	sail	mad	tall	half	mad	above	damp	sail	81
key	valley	fail	narrow	question	ill	until	jelly	bake	90
cage	ocean	radio	sale	wake	eagle	across	lady	page	99
gas	until	tall	jelly	sail	valley	page	ocean	radio	108
across	gas	fail	key	cage	sale	ill	lady	jelly	117

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ORANGE COUNTY PUBLIC SCHOOLS
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State Assessment Grade 5
Unit 3

quick	salt	kick	ear	gate	raise	offer	hall	lake	9
add	faint	tank	magic	use	nation	dance	jet	pail	18
same	vegetable	calm	imagine	act	wall	bananas	offer	use	27
imagine	dance	bananas	faint	lake	act	quick	add	tank	36
nation	calm	raise	hall	kick	salt	ear	wall	gate	45
vegetable	same	jet	magic	pail	ear	faint	imagine	nation	54
kick	tank	bananas	pail	act	use	jet	raise	salt	63
add	hall	vegetable	quick	dance	wall	offer	gate	magic	72
same	calm	lake	add	use	offer	jet	calm	imagine	81
ear	gate	bananas	pail	quick	lake	kick	raise	tank	90
same	salt	vegetable	nation	magic	faint	act	wall	dance	99
hall	vegetable	magic	quick	dance	bananas	kick	faint	raise	108
ear	hall	gate	use	act	lake	jet	calm	salt	117

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State Assessment Grade 5
Unit 4

danger	adventure	bang	same	tap	sand	pair	early	8
land	quiet	ranch	neat	mail	afraid	kill	important	16
fair	band	jewels	gather	wander	camera	office	village	24
hammer	quiet	wander	band	tap	office	gather	mail	32
adventure	neat	land	sand	same	pair	afraid	fair	40
kill	village	camera	danger	hammer	ranch	important	early	48
bang	jewels	ranch	tap	neat	quiet	same	fair	56
village	danger	gather	afraid	important	wander	adventure	band	64
camera	office	sand	kill	early	mail	bang	hammer	72
land	pair	jewels	office	hammer	afraid	important	wander	80
quiet	neat	mail	jewels	band	fair	ranch	land	88
gather	village	tap	camera	early	sand	danger	bang	96
same	pair	kill	adventure	tap	bang	hammer	land	104

ORANGE COUNTY PUBLIC SCHOOLS
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State Assessment Grade 5
Unit 5

main	fall	rather	earn	often	sandwiches	palace	inch	8
sank	lap	war	camp	dare	visit	dash	candle	16
hang	gay	kind	age	taste	neck	job	quite	24
bank	often	war	gay	hang	palace	quite	camp	32
bank	earn	dare	kind	taste	candle	sank	neck	40
main	lap	sandwiches	age	job	inch	fall	visit	48
rather	dash	job	rather	earn	visit	inch	age	56
candle	often	kind	taste	palace	camp	hang	main	64
war	sank	sandwiches	fall	dare	neck	lap	dash	72
age	bank	gay	quite	dash	earn	sandwiches	job	80
bank	lap	often	neck	fall	war	palace	gay	88
camp	dare	hang	taste	main	quite	rather	age	96
kind	sank	visit	candle	inch	dare	war	main	104

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PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 6

reach	join	daughter	king	teach	need	manage	fan	8
oil	gaze	pale	happen	aim	east	bar	candy	16
save	voice	earth	warm	large	gentle	family	satisfy	24
indeed	gaze	candy	oil	warm	king	aim	large	32
teach	daughter	gentle	family	reach	join	happen	satisfy	40
save	pale	voice	need	earth	indeed	east	fan	48
manage	bar	happen	join	family	earth	gentle	manage	56
satisfy	large	need	fan	daughter	indeed	aim	warm	64
candy	east	teach	oil	reach	gaze	king	bar	72
save	voice	pale	aim	east	gaze	indeed	warm	80
teach	earth	voice	fan	oil	satisfy	pale	need	88
gentle	reach	manage	family	save	join	large	bar	96
candy	happen	king	daughter	save	need	reach	warm	104

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State Assessment Grade 5
Unit 7

kiss	warn	dawn	alarm	pan	map	needle	real	8
only	easy	cannon	giant	team	say	joke	air	16
inn	fancy	bark	canoe	barrel	harbor	scarce	dead	24
late	harbor	air	dead	needle	bark	alarm	giant	32
only	pan	kiss	only	fancy	team	easy	canoe	40
joke	map	cannon	real	warn	say	late	barrel	48
scarce	dawn	inn	dead	alarm	kiss	pan	canoe	56
warn	joke	bark	dawn	scarce	easy	inn	needle	64
late	team	harbor	fancy	air	real	say	barrel	72
giant	map	only	easy	pan	dawn	real	dead	80
cannon	alarm	air	warn	only	inn	map	joke	88
fancy	kiss	bark	barrel	giant	needle	harbor	say	96
scarce	team	canoe	late	cannon	bark	real	needle	104

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State Assessment Grade 5
Unit 8

gift	allow	dear	scatter	scared	edge	open	wash	8
almost	rear	journey	bat	kitchen	march	captain	inquire	16
farther	base	neighbor	paper	cap	law	teeth	harm	24
decide	dear	base	inquire	law	paper	almost	cap	32
edge	wash	rear	march	decide	kitchen	journey	bat	40
scared	neighbor	captain	scatter	open	allow	gift	harm	48
farther	teeth	kitchen	wash	journey	scatter	gift	farther	56
rear	open	edge	teeth	bat	almost	neighbor	captain	64
allow	decide	cap	harm	base	scared	march	law	72
paper	dear	inquire	neighbor	cap	open	gift	journey	80
almost	wash	farther	teeth	bat	scatter	inquire	dear	88
base	rear	captain	edge	allow	harm	scared	paper	96
law	kitchen	march	decide	almost	cap	open	wash	104

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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State Assessment Grade 5
Unit 9

glance	neither	joy	reason	beach	mark	telephone	deep	8
fat	bean	waste	eight	scene	orange	insect	also	16
harness	card	deck	part	care	lay	kite	always	24
scratch	telephone	joy	part	glance	kite	deck	harness	32
bean	lay	orange	card	scratch	reason	mark	deep	40
fat	always	also	insect	eight	care	beach	neither	48
waste	scene	fat	part	mark	deck	scene	reason	56
eight	also	harness	scratch	care	card	joy	neither	64
bean	waste	insect	beach	orange	telephone	always	glance	72
deep	kite	lay	insect	telephone	care	fat	part	80
waste	deck	bean	kite	reason	eight	neither	card	88
scene	beach	always	lay	also	scratch	harness	deep	96
joy	mark	orange	glance	kite	reason	beach	glance	104

ORANGE COUNTY PUBLIC SCHOOLS
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State Assessment Grade 5
Unit 10

beard	watch	depend	fault	judge	glass	bath	screamed	8
sea	instead	carry	hate	knife	receive	deer	cart	16
net	either	pass	lazy	order	already	market	deer	24
television	amazing	pass	sea	market	bath	order	depend	32
hate	watch	cart	instead	net	receive	judge	either	40
glass	lazy	beard	knife	carry	television	already	screamed	48
fault	amazing	sea	judge	depend	screamed	net	watch	56
hate	deer	carry	fault	television	order	already	either	64
bath	cart	receive	pass	beard	knife	market	instead	72
glass	amazing	lazy	screamed	knife	cart	television	lazy	80
already	market	amazing	net	glass	beard	depend	deer	88
watch	hate	instead	receive	carry	judge	bath	sea	96
either	pass	order	fault	screamed	depend	sea	instead	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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State Assessment Grade 5
Unit 11

desk	nice	angry	elephant	hay	interest	lead	past	8
recognize	marry	juice	desert	beast	case	ten	wave	16
beat	knight	gold	search	among	organ	cattle	season	24
fear	beast	lead	desk	nice	knight	cattle	marry	32
season	among	recognize	beat	elephant	past	juice	organ	40
angry	gold	ten	case	wave	hay	desert	search	48
interest	fear	interest	search	knight	marry	case	past	56
elephant	nice	fear	season	ten	lead	angry	beat	64
desk	hay	cattle	desert	beast	among	organ	wave	72
recognize	gold	juice	season	beat	ten	wave	search	80
gold	among	elephant	knight	beast	organ	case	angry	88
recognize	juice	marry	fear	hay	cattle	desert	lead	96
desk	interest	nice	past	knight	recognize	angry	past	104

State Assessment Grade 5
Unit 12

feast	diamond	weak	answer	cause	heart	ought	seat	8
tender	elevator	leaf	announce	second	master	eleven	nickel	16
beauty	feather	record	cave	goose	paste	die	beaver	24
invite	paste	weak	feather	feast	goose	invite	nickel	32
eleven	seat	beauty	elevator	heart	diamond	beaver	ought	40
second	die	leaf	tender	record	answer	cause	master	48
cave	announce	tender	paste	beaver	announce	heart	master	56
goose	seat	cave	nickel	feather	eleven	beauty	record	64
diamond	invite	elevator	die	ought	cause	second	leaf	72
feast	weak	answer	cave	seat	answer	paste	beaver	80
feather	master	beauty	eleven	goose	heart	second	tender	88
ought	record	announce	diamond	nickel	elevator	invite	feast	96
weak	die	cause	leaf	heart	cause	weak	master	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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State Assessment Grade 5
Unit 13

seize center beg heat record dig been secret 8
seem match ant cent lean else grab iron 16
seed wear appear tent nine empty patch dime 24
fed match dime cent patch else secret nine 32
record iron center been seem seize empty wear 40
seed dig heat lean tent grab fed beg 48
appear ant dig else appear record seem grab 56
been match cent nine dime seed patch wear 64
empty center beg iron ant tent secret fed 72
lean seize heat else record wear beg center 80
heat iron nine secret dime ant tent seize 88
fed cent grab appear patch dig seed seem 96
been lean match empty center heat seem wear 104

ORANGE COUNTY PUBLIC SCHOOLS
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State Assessment Grade 5
Unit 14

path	begin	island	behave	apron	end	send	dine	*8*
refuse	terrible	dinner	sense	arm	feed	oven	weather	*16*
mate	certain	grain	learn	nod	chain	engine	heaven	*24*
serious	heaven	serious	feed	terrible	dine	mate	learn	*32*
path	behave	grain	island	engine	dinner	end	apron	*40*
nod	begin	chain	certain	weather	sense	oven	arm	*48*
refuse	send	begin	path	chain	serious	arm	engine	*56*
dine	terrible	sense	oven	end	feed	apron	send	*64*
refuse	heaven	weather	certain	grain	dinner	mate	nod	*72*
learn	behave	island	nod	oven	begin	feed	sense	*80*
refuse	certain	dine	learn	behave	grain	heaven	apron	*88*
mate	chain	terrible	dinner	island	arm	engine	send	*96*
path	end	serious	weather	behave	heaven	end	feed	*104*

ORANGE COUNTY PUBLIC SCHOOLS
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State Assessment Grade 5
Unit 15

serve	owl	remain	heavy	paws	several	great	set	*8*
seven	week	dirt	heel	gray	chair	none	left	*16*
arm	matter	test	shade	fell	leave	feel	enjoy	*24*
believe	heavy	great	dirt	fell	test	feel	set	*32*
owl	remain	shade	week	seven	gray	believe	chair	*40*
several	matter	serve	heel	arm	left	leave	enjoy	*48*
none	paws	gray	arm	feel	shade	fell	heel	*56*
matter	heavy	seven	enjoy	none	left	paws	great	*64*
owl	week	test	dirt	believe	several	serve	set	*72*
chair	remain	leave	gray	owl	test	serve	arm	*80*
matter	believe	none	fell	chair	dirt	paws	heel	*88*
enjoy	heavy	week	seven	shade	set	left	several	*96*
leave	remain	feel	great	paws	none	remain	heel	*104*

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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State Assessment Grade 5
Unit 16

grin	army	north	mayor	shake	bell	weigh	dish	8
chance	leg	sharp	shall	shape	shadow	remember	own	16
change	share	herd	belt	thick	fellow	arrange	enough	24
pay	shape	chance	herd	mayor	shadow	enough	army	32
share	shall	bell	shake	change	leg	belt	remember	40
thick	north	fellow	sharp	pay	grin	dish	weigh	48
arrange	own	shake	pay	shadow	thick	enough	fellow	56
weigh	chance	herd	shall	grin	shape	bell	own	64
north	army	dish	sharp	remember	leg	change	share	72
mayor	arrange	belt	weigh	pay	arrange	leg	dish	80
shadow	remember	mayor	army	north	chance	thick	grin	88
fellow	shape	own	shake	change	bell	enough	belt	96
sharp	shall	share	herd	weigh	army	mayor	belt	104

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State Assessment Grade 5
Unit 17

note	shine	charge	hero	bench	divide	welcome	sheet	8
thin	escape	pen	shell	meadow	repeat	shelf	arrow	16
less	group	dive	fence	sheep	enter	thief	shed	24
few	group	arrow	thief	charge	hero	divide	thin	32
pen	shed	note	less	few	fence	sheep	enter	40
meadow	escape	dive	bench	shell	repeat	shine	shelf	48
sheet	welcome	repeat	welcome	shell	fence	group	few	56
note	less	divide	hero	thief	pen	bench	shine	64
dive	shelf	charge	meadow	sheep	escape	enter	shed	72
arrow	sheet	thin	hero	few	shine	dive	meadow	80
shed	bench	arrow	thin	sheep	less	sheet	fence	88
thief	welcome	repeat	pen	divide	shell	shelf	charge	96
enter	note	escape	group	hero	shed	thin	shine	104

ORANGE COUNTY PUBLIC SCHOOLS
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State Assessment Grade 5
Unit 18

doctor	third	meal	shop	guide	knock	notice	arrive	8
shore	hide	shook	ship	pencil	well	chase	guard	16
field	even	bend	hid	shirt	library	reply	lesson	24
shoot	knock	notice	pencil	guard	doctor	third	field	32
reply	hide	shoot	library	arrive	shore	bend	shop	40
meal	shook	lesson	guide	even	chase	shirt	hid	48
ship	well	shoot	knock	hid	chase	lesson	guard	56
field	ship	bend	reply	arrive	pencil	shirt	even	64
well	third	shore	shook	doctor	shop	hide	guide	72
library	meal	notice	knock	meal	shirt	even	shop	80
ship	library	guard	chase	lesson	well	shoot	guide	88
reply	hid	field	notice	shook	hide	shore	arrive	96
pencil	third	doctor	bend	shirt	doctor	third	meal	104

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State Assessment Grade 5
Unit 19

fierce	berries	history	rescue	thirteen	perhaps	shy	shout	8
respect	nut	west	event	dollar	mean	shut	cheek	16
short	should	meat	piano	ate	gun	shot	lie	24
number	dollar	thirteen	shut	rescue	berries	mean	gun	32
perhaps	lie	cheek	number	history	fierce	west	piano	40
shot	respect	meat	short	ate	nut	event	should	48
nut	shout	rescue	event	short	shy	respect	number	56
meat	should	shy	ate	fierce	shot	history	berries	64
shout	mean	cheek	thirteen	perhaps	lie	piano	west	72
dollar	short	shot	perhaps	gun	nut	berries	fierce	80
shut	shy	dollar	lie	event	respect	thirteen	meat	88
history	should	shout	west	ate	rescue	piano	number	96
cheek	mean	dollar	event	nut	fierce	shot	should	104

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State Assessment Grade 5
Unit 20

pick	hit	silly	automobile	sick	sign	whale	silver	8
cheer	sigh	attack	rest	beyond	thirty	wheat	life	16
fifteen	silent	between	side	donkey	meet	simple	ever	24
though	cheer	attack	though	thirty	simple	pick	automobile	32
hit	side	beyond	silver	silly	life	silent	wheat	40
sick	meet	rest	whale	between	ever	sign	donkey	48
sigh	fifteen	meet	side	wheat	rest	sigh	whale	56
silent	silly	fifteen	automobile	between	pick	donkey	attack	64
simple	silver	beyond	sign	though	life	cheer	ever	72
thirty	sick	hit	side	though	silver	ever	cheer	80
sign	rest	sigh	silly	between	donkey	pick	wheat	88
thirty	simple	attack	beyond	meet	sick	whale	silent	96
life	automobile	hit	fifteen	rest	donkey	sick	silly	104

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PRECISION TEACHING PROJECT
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State Assessment Grade 5
Unit 21

example	bill	since	cherry	thought	six	except	size	8
pie	rest	melt	wheel	sir	drag	autumn	drank	16
line	cheese	hole	lift	fifty	holiday	single	sister	24
fifth	autumn	six	holiday	since	fifth	size	thought	32
sister	sir	pie	drank	single	hole	fifty	except	40
lift	example	bill	melt	cherry	rest	wheel	line	48
cheese	drag	except	wheel	since	drank	cheese	melt	56
hole	rest	sir	bill	lift	single	cherry	six	64
holiday	fifty	size	fifth	thought	autumn	line	pie	72
drag	example	sister	drag	bill	pie	lift	sister	80
example	autumn	except	holiday	single	fifty	melt	fifth	88
line	thought	wheel	rest	size	drank	cherry	six	96
cheese	since	sir	hole	size	line	except	fifty	104

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State Assessment Grade 5
Unit 22

average	sky	thousand	birth	dream	which	sled	slip	8
chest	excitement	skin	skates	draw	awful	fight	hollow	16
merry	rest	fill	slide	pie	chewing	lion	bit	24
excited	bit	fight	pie	thousand	fill	slip	hollow	32
dream	which	sky	awful	merry	skin	chewing	birth	40
skates	sled	lion	draw	chest	excitement	average	rest	48
slide	excited	fill	thousand	rest	which	fight	draw	56
bit	excitement	slip	sky	chest	dream	excited	average	64
awful	sled	birth	hollow	skates	pie	chewing	slide	72
lion	skin	merry	sled	chewing	slip	birth	fight	80
sky	awful	excitement	average	skates	skin	draw	excited	88
thousand	slide	dream	merry	fill	rest	hollow	bit	96
chest	which	pie	lion	rest	dream	merry	which	104

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State Assessment Grade 5
Unit 23

smile	ax	message	exciting	pile	smoke	piece	ribbon	8
list	while	smart	slow	thread	smell	chicken	metal	16
ribs	small	honor	hook	listen	smooth	bite	drift	24
finger	smoke	hook	chicken	thread	smooth	list	smell	32
drift	finger	listen	metal	small	piece	pile	bite	40
slow	while	smile	ax	honor	exciting	ribbon	smart	48
ribbon	thread	ribs	message	slow	smoke	list	small	56
message	ribs	hook	drift	pile	metal	while	bite	64
finger	piece	ax	exciting	smooth	smart	honor	chicken	72
listen	smile	smell	smooth	ax	metal	message	small	80
bite	listen	smoke	thread	honor	ribs	pile	while	88
finger	smart	hook	drift	ribbon	smile	chicken	list	96
slow	smell	piece	exciting	bite	smoke	list	ribbon	104

ORANGE COUNTY PUBLIC SCHOOLS
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State Assessment Grade 5
Unit 24

middle	hop	snap	drive	soap	pilot	soft	socks	8
lock	hope	exclaim	child	whip	finish	load	throat	16
blade	fix	snake	pillow	drink	blanket	mice	rich	24
chief	drive	load	blanket	lock	mice	snake	hope	32
fix	throat	socks	soap	rich	pilot	pillow	drink	40
finish	middle	exclaim	whip	hop	snap	chief	soft	48
blade	child	finish	exclaim	pilot	load	pillow	blanket	56
mice	child	hope	soft	hop	snap	chief	drink	64
snake	blade	soap	middle	lock	socks	drive	throat	72
rich	fix	whip	snap	drink	soft	load	socks	80
finish	throat	hope	child	drive	whip	fix	chief	88
hop	blanket	pilot	rich	pillow	exclaim	blade	soap	96
middle	mice	snake	lock	middle	pilot	socks	mice	104

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State Assessment Grade 5
Unit 25

son	drop	horn	through	rid	log	flame	drum	8
sold	excuse	flag	sorry	chin	pine	might	ring	16
sort	song	pin	chimney	whisper	hose	bless	blast	24
loose	drop	ring	flag	blast	bless	pine	rid	32
flame	song	excuse	chin	loose	son	sort	chimney	40
sorry	pin	horn	whisper	through	might	hose	drum	48
sold	log	might	bless	sort	through	pin	rid	56
son	whisper	drop	drum	blast	flame	sold	chin	64
horn	hose	ring	log	excuse	song	flag	loose	72
sorry	chimney	pine	chin	might	whisper	pine	rid	80
log	song	drum	blast	bless	horn	sorry	chimney	88
hose	excuse	drop	loose	ring	pin	son	flame	96
through	flag	sort	sold	rid	through	blast	loose	104

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State Assessment Grade 5
Unit 26

dry	chocolate	mill	exercise	choose	spare	flash	south	8
lose	flat	throw	lot	pink	during	soup	hour	16
hospital	mile	blind	whistle	ripe	sound	block	space	24
expect	hour	pink	blind	soup	lot	hospital	throw	32
ripe	south	during	lose	dry	spare	flat	expect	40
chocolate	block	exercise	whistle	flash	choose	sound	mile	48
mill	space	pink	flash	whistle	lose	mill	expect	56
chocolate	during	mile	soup	flat	blind	hour	sound	64
south	hospital	dry	space	spare	exercise	lot	block	72
throw	ripe	choose	pink	flat	choose	flash	sound	80
lose	south	mill	throw	spare	block	dry	expect	88
ripe	during	space	lot	blind	hour	whistle	soup	96
chocolate	exercise	hospital	mile	lose	during	south	dry	104

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PRECISION TEACHING PROJECT
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State Assessment Grade 5
Unit 27

explain	whole	mine	spark	ticket	extra	dust	pitch	8
huge	spend	blossoms	loud	circle	love	mind	river	16
church	speed	pipe	flat	blood	speak	float	special	24
hour	huge	love	pipe	float	blossoms	extra	mind	32
whole	river	speed	church	mine	pitch	explain	blood	40
special	ticket	hour	circle	dust	spark	loud	flat	48
speak	spend	flat	spark	blossoms	blood	river	ticket	56
hour	speak	pitch	dust	love	mine	spend	explain	64
loud	mind	whole	church	special	extra	speed	pipe	72
circle	huge	float	explain	ticket	whole	float	blossoms	80
pipe	circle	speed	church	spend	hour	pitch	extra	88
mind	blood	love	mine	dust	flat	special	spark	96
speak	huge	loud	river	love	mind	whole	church	104

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 28

rock	spin	whose	tie	roar	split	blow	spoil	8
class	splash	spider	hungry	minute	hundred	spirit	lumber	16
board	city	flour	place	low	eye	mirror	floor	24
plain	hundred	spoil	mirror	whose	minute	rock	blow	32
class	low	plain	place	board	spider	spirit	lumber	40
floor	roar	spin	tie	splash	eye	hungry	split	48
city	flour	blow	mirror	low	hundred	place	hungry	56
floor	plain	spider	class	spin	board	lumber	tie	64
city	flour	spoil	roar	rock	splash	split	eye	72
minute	whose	spirit	spoil	lumber	plain	city	flour	80
class	splash	roar	rock	tie	eye	hungry	mirror	88
place	minute	spider	low	spin	board	floor	split	96
hundred	spirit	whose	blow	spirit	blow	spoil	class	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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State Assessment Grade 5
Unit 29

roll	stand	body	bold	flow	spoke	boil	plan	8
clean	spot	spread	roll	clear	clever	plan	hunt	16
stamp	hunt	stair	tight	mistake	till	hunt	flow	24
stage	stair	body	stamp	spoke	mistake	till	clever	32
plan	tight	flow	hunt	stand	plan	bold	clean	40
stage	flow	roll	spot	hunt	spread	roll	hunt	48
boil	clear	hunt	stand	tight	spoke	hunt	roll	56
clever	boil	flow	stamp	mistake	body	clear	spot	64
stage	clean	stair	spread	plan	till	flow	bold	72
plan	hunt	stair	body	plan	spread	clever	stamp	80
clean	tight	hunt	clear	flow	spoke	hunt	stage	88
plan	flow	spot	stand	bold	roll	till	boil	96
hunt	roll	mistake	bold	flow	spread	stand	hunt	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 30

mix	boots	start	tip	plant	husband	bold	close	8
hurt	clock	stare	model	star	bone	barn	climb	16
lump	plane	roof	cliff	fold	clothes	cloth	tiny	24
fog	roof	climb	bone	boots	tip	mix	fold	32
plane	star	model	clothes	hurt	fog	close	start	40
clock	barn	stare	cloth	lump	tiny	plant	husband	48
cliff	bold	close	clock	husband	star	fold	tiny	56
cloth	bold	mix	start	barn	cliff	plant	stare	64
lump	fog	roof	hurt	tip	model	bone	clothes	72
boots	plane	climb	bone	barn	start	clock	cliff	80
bold	roof	hurt	mix	plane	star	fold	fog	88
tip	close	climb	stare	model	lump	boots	cloth	96
tiny	husband	clothes	plant	bone	cloth	stare	start	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 31

tire	today	follow	steam	month	borrow	startled	coast	8
moment	club	plenty	state	cloud	steal	bother	both	16
coal	food	together	coach	steep	rope	plate	rose	24
pleasant	rope	both	food	club	plenty	cloud	plate	32
follow	month	tire	steam	coal	steal	coast	pleasant	40
coach	bother	startled	together	steep	borrow	moment	state	48
today	rose	food	today	steam	coach	both	pleasant	56
club	rope	follow	moment	together	bother	startled	plenty	64
plate	tire	state	coast	cloud	coal	month	steep	72
steal	borrow	rose	coal	follow	rose	state	month	80
rope	club	coach	today	together	club	bother	plate	88
coast	pleasant	startled	tire	steal	both	plenty	steep	96
borrow	food	moment	steam	club	plate	tire	rope	104

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 32

foot	stem	plow	tomorrow	route	tooth	steer	bow	8
round	bottle	fool	stiff	comb	tool	moon	coffee	16
stick	coast	point	bottom	bother	pole	colt	coal	24
root	plow	fool	bottle	bow	point	moon	coffee	32
round	pole	stick	foot	comb	bottom	coal	steer	40
tomorrow	route	colt	tool	stem	root	coast	tooth	48
stiff	bother	moon	stiff	point	foot	tooth	route	56
coffee	steer	tomorrow	root	stick	bottle	stem	tool	64
fool	round	bother	coast	bow	pole	comb	bottom	72
colt	plow	coal	point	stem	stick	steer	coast	80
comb	bottom	coffee	bow	bother	colt	route	stiff	88
root	plow	pole	bottle	coal	tooth	foot	tomorrow	96
tool	moon	round	fool	coast	foot	root	stiff	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 33

branch	contest	force	straight	row	complete	stir	most	8
brave	forest	touch	polite	content	storm	still	bowl	16
company	common	bread	motor	police	top	toward	tossed	24
stone	branch	top	force	brave	bread	complete	straight	32
tossed	stir	touch	bowl	still	content	company	row	40
toward	forest	contest	common	police	stone	most	polite	48
motor	storm	toward	bread	bowl	police	storm	branch	56
stir	still	content	company	polite	straight	contest	common	64
complete	touch	tossed	brave	force	stone	motor	most	72
forest	row	top	stir	contest	toward	police	straight	80
motor	touch	common	branch	most	storm	stone	bread	88
company	forest	content	force	bowl	tossed	top	complete	96
still	row	polite	brave	top	company	tossed	stone	104

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 34

corn	breath	track	stretch	break	pop	forth	poor	8
pond	pool	corner	stream	trade	form	cooper	rub	16
traffic	cook	straw	continue	strange	tower	cool	copy	24
rubber	pop	corn	cool	continue	break	pond	pool	32
tower	rub	traffic	copy	trade	straw	track	cooper	40
rubber	strange	stream	poor	stretch	forth	cook	corner	48
form	breath	poor	continue	pond	rubber	cool	breath	56
corn	stretch	cooper	traffic	trade	corner	cook	strange	64
track	break	forth	stream	tower	pool	pop	copy	72
straw	form	rub	cooper	cool	trade	rub	continue	80
straw	pond	cook	pool	poor	stretch	pop	form	88
strange	rubber	forth	track	breath	copy	stream	corn	96
break	corner	tower	traffic	pop	pond	breath	traffic	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 35

forty	strip	string	fox	trail	mount	strike	correct	8
country	travel	courage	forward	possible	count	trap	strong	16
porch	fortune	cost	pound	costume	pot	strike	pour	24
fox	potato	forty	correct	travel	count	post	strong	32
pour	forward	string	pound	country	pot	fortune	trail	40
cost	potato	costume	strip	courage	post	possible	mount	48
trap	porch	count	cost	fortune	trail	courage	string	56
forty	pour	trap	pound	strip	pot	strike	strong	64
correct	porch	mount	post	country	fox	costume	forward	72
travel	possible	trap	potato	trail	fox	post	pound	80
travel	cost	strong	string	courage	pour	mount	fortune	88
forty	forward	country	porch	costume	count	fox	potato	96
mount	possible	forward	cost	forty	trap	strike	fortune	104

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 36

present	practice	free	course	tribe	brook	treasure	breeze	8
struggle	freezing	stuff	power	study	prepare	bright	tremble	16
brick	such	trip	frame	mountain	cousin	crack	bridge	24
cover	study	trip	bridge	power	bright	tribe	brook	32
tremble	present	treasure	frame	prepare	brick	such	crack	40
course	stuff	breeze	cover	struggle	cousin	free	practice	48
mountain	freezing	cover	frame	practice	stuff	breeze	study	56
cousin	bright	tribe	trip	struggle	brook	free	brick	64
freezing	bridge	such	treasure	course	crack	prepare	present	72
mountain	tremble	power	brick	tremble	such	treasure	tribe	80
course	practice	struggle	stuff	free	brook	study	breeze	88
frame	bright	freezing	mountain	present	cousin	trip	cover	96
bridge	power	prepare	crack	struggle	breeze	such	bridge	104

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 37

trunk	front	brother	crawl	trouble	price	creek	suit	8
move	summer	cream	brush	fresh	president	press	bubbles	16
sudden	frightened	true	crash	bucket	supper	mouth	mouse	24
rule	brother	price	press	bucket	true	suit	president	32
mouse	trouble	summer	rule	frightened	cream	trunk	sudden	40
crawl	front	brush	crash	supper	move	mouth	bubbles	48
fresh	creek	press	summer	mouse	bubbles	supper	crawl	56
trouble	true	president	sudden	brother	mouth	trunk	front	64
creek	move	frightened	bucket	suit	fresh	cream	brush	72
crash	price	rule	bubbles	rule	mouse	frightened	summer	80
cream	front	sudden	crash	mouth	price	trouble	crawl	88
move	suit	brother	bucket	trunk	press	supper	creek	96
fresh	true	president	brush	rule	bubbles	front	press	104

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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State Assessment Grade 5
Unit 38

crown	buffalo	suppose	bunch	print	probably	swallow	trust	8
crept	awful	cross	mud	apron	rush	crowd	sure	16
bull	swam	bulb	full	fruit	tube	truth	build	24
cup	suppose	apron	rush	buffalo	fruit	swallow	truth	32
crowd	swam	build	tube	probably	bulb	print	full	40
mud	bull	cross	cup	bunch	crown	trust	crept	48
awful	sure	bunch	fruit	buffalo	build	apron	bull	56
rush	crown	crept	suppose	tube	bulb	probably	swam	64
swallow	cross	mud	cup	print	sure	trust	full	72
awful	truth	crowd	crown	buffalo	suppose	mud	bulb	80
fruit	apron	swam	bull	trust	print	swallow	sure	88
full	crept	crowd	cross	rush	tube	bunch	awful	96
cup	build	truth	probably	awful	swallow	swam	tube	104

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 39

twelve	elephant	swim	proud	swift	sweep	glance	gay	8
burn	tune	fancy	cut	fur	turn	tunnel	sweet	16
dine	curtain	promise	bundle	grain	forth	curious	dash	24
mate	grain	cut	twelve	turn	fur	gay	burn	32
swift	swim	tune	mate	glance	sweep	sweet	dine	40
elephant	bundle	dash	curtain	curious	fancy	proud	forth	48
tunnel	promise	sweet	fancy	tunnel	proud	tune	turn	56
dash	glance	gay	grain	elephant	forth	bundle	fur	64
twelve	promise	swift	cut	swim	mate	dine	curtain	72
burn	sweep	curious	forth	sweet	dine	grain	proud	80
twelve	curtain	mate	cut	promise	elephant	swim	turn	88
curious	fancy	tunnel	burn	gay	bundle	tune	swift	96
fur	dash	sweep	glance	dine	glance	cut	grain	104

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

State Assessment Grade 5
Unit 40

purple	butter	busy	bless	respect	swing	twenty	finish	8
cliff	prove	puzzle	button	scarce	shelf	spoil	tube	16
push	twice	bush	enter	rescue	switch	costume	automobile	24
perhaps	twice	switch	bless	swing	cliff	button	respect	32
tube	busy	prove	shelf	butter	scarce	bush	twenty	40
costume	puzzle	purple	push	rescue	finish	spoil	perhaps	48
automobile	enter	button	perhaps	bush	cliff	finish	twice	56
twenty	prove	bless	switch	respect	scarce	purple	costume	64
automobile	enter	rescue	shelf	tube	puzzle	swing	spoil	72
busy	push	butter	twenty	automobile	bush	shelf	butter	80
bless	purple	scarce	puzzle	spoil	finish	button	cliff	88
push	rescue	enter	swing	perhaps	prove	costume	tube	96
busy	twice	switch	respect	puzzle	bless	bush	busy	104

VOCABULARY DEVELOPMENT

State Assessment - Grade 8

Unit 1
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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 1

attend	progress	achieve	professor	opportunity	grade	fact	7
principal	period	student	spell	college	geography	dictionary	14
memory	subject	difficult	university	pupil	education	geography	21
period	principal	opportunity	education	professor	achieve	grade	28
attend	difficult	college	student	pupil	memory	spell	35
progress	university	subject	dictionary	fact	memory	attend	42
student	geography	principal	fact	college	progress	dictionary	49
university	achieve	difficult	professor	spell	grade	education	56
period	opportunity	pupil	subject	dictionary	pupil	university	63
progress	grade	college	opportunity	memory	geography	period	70
attend	student	spell	education	subject	principal	professor	77
achieve	difficult	fact	college	spell	achieve	opportunity	84
progress	attend	student	education	grade	professor	difficult	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 2

destroy	entire	troop	military	general	victory	warrior	7
conquered	explosion	colonel	defeat	mission	battle	soldier	14
quarrel	weapon	enemy	defend	command	fought	quarrel	21
mission	general	defend	battle	enemy	entire	defeat	28
weapon	warrior	military	destroy	conquered	soldier	explosion	35
command	fought	troop	colonel	victory	military	quarrel	42
general	defeat	defend	destroy	fought	entire	victory	49
weapon	enemy	mission	troop	soldier	warrior	colonel	56
command	conquered	explosion	battle	defeat	colonel	entire	63
destroy	warrior	general	enemy	battle	command	fought	70
weapon	troop	quarrel	explosion	military	soldier	victory	77
mission	defend	conquered	command	explosion	entire	fought	84
enemy	battle	victory	general	military	destroy	mission	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 3

flesh	tongue	stomach	toe	gum	nerve	knee	7
seat	lungs	tear	lip	palm	breathe	muscle	14
wrist	brain	thumb	waist	fist	shoulder	brain	21
toe	nerve	stomach	flesh	shoulder	seat	fist	28
lip	tear	breathe	muscle	gum	knee	palm	35
tongue	tongue	thumb	wrist	waist	lungs	wrist	42
seat	flesh	palm	gum	muscle	brain	toe	49
thumb	knee	stomach	tongue	tear	lungs	breathe	56
lip	fist	nerve	waist	shoulder	tongue	muscle	63
gum	lip	wrist	knee	seat	palm	flesh	70
flesh	toe	nerve	shoulder	breathe	thumb	lungs	77
tear	stomach	waist	brain	fist	wrist	lip	84
waist	breathe	tongue	palm	knee	fist	thumb	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 4

prevent	pain	cast	fever	stroke	aid	vision	7
medicine	physical	suffer	operate	wound	patient	disease	14
alcohol	oxygen	swell	temperature	health	strain	prevent	21
oxygen	patient	alcohol	cast	health	medicine	fever	28
vision	wound	temperature	physical	swell	operate	suffer	35
strain	disease	pain	aid	stroke	temperature	oxygen	42
stroke	cast	prevent	aid	fever	disease	pain	49
wound	medicine	physical	strain	patient	health	swell	56
alcohol	suffer	vision	operate	pain	swell	medicine	63
operate	wound	disease	cast	alcohol	prevent	fever	70
physical	aid	oxygen	strain	stroke	suffer	health	77
vision	patient	temperature	wound	disease	vision	cast	84
alcohol	strain	physical	medicine	operate	fever	prevent	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 5

refrigerator	beef	treat	sugar	date	wine	blend	7
tea	peach	hunger	olive	turkey	raw	restaurant	14
crust	bacon	cabbage	soda	maple	grapes	soda	21
tea	treat	blend	peach	refrigerator	hunger	cabbage	28
turkey	date	maple	bacon	olive	refrigerator	grapes	35
sugar	wine	beef	crust	raw	wine	peach	42
treat	bacon	grapes	hunger	raw	soda	date	49
maple	tea	crust	cabbage	refrigerator	olive	restaurant	56
blend	beef	sugar	turkey	grapes	hunger	crust	63
tea	maple	wine	beef	olive	restaurant	date	70
peach	refrigerator	blend	raw	bacon	cabbage	treat	77
soda	sugar	olive	blend	treat	tea	crust	84
maple	raw	soda	date	hunger	turkey	grapes	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 6

atmosphere	planet	reflect	chart	universe	curve	astronaut	7
beam	expedition	program	explore	horizon	rocket	satellite	14
flight	ray	colony	angle	orbit	vacuum	orbit	21
satellite	planet	program	atmosphere	explore	curve	universe	28
angle	astronaut	chart	ray	rocket	flight	beam	35
vacuum	expedition	horizon	reflect	colony	chart	planet	42
orbit	beam	rocket	vacuum	horizon	angle	satellite	49
colony	universe	astronaut	atmosphere	ray	flight	expedition	56
program	reflect	explore	curve	universe	colony	orbit	63
reflect	expedition	horizon	astronaut	angle	explore	vacuum	70
chart	ray	curve	flight	atmosphere	beam	planet	77
satellite	rocket	program	chart	reflect	program	universe	84
atmosphere	expedition	beam	explore	curve	rocket	planet	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 7

self	witch	saint	slave	companion	lad	gang	7
native	folk	youth	audience	human	character	couple	14
male	female	kid	citizen	whom	person	companion	21
whom	folk	character	audience	native	couple	male	28
kid	saint	person	citizen	slave	gang	lad	35
witch	youth	human	self	female	couple	character	42
native	slave	youth	gang	saint	male	folk	49
lad	witch	female	citizen	person	whom	companion	56
audience	self	kid	lad	character	kid	person	63
companion	human	gang	whom	audience	couple	self	70
folk	slave	citizen	youth	male	witch	female	77
saint	native	witch	slave	human	lad	person	84
whom	male	self	gang	citizen	audience	couple	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 8

purchase	collect	salary	owe	check	coin	profit	7
figure	due	credit	cheap	account	wealth	expensive	14
afford	limit	amount	debt	value	account	limit	21
expensive	purchase	figure	amount	afford	value	salary	28
owe	check	collect	credit	profit	wealth	cheap	35
coin	debt	due	figure	collect	profit	check	42
credit	due	amount	coin	wealth	afford	owe	49
value	purchase	account	debt	limit	expensive	cheap	56
salary	collect	afford	credit	wealth	owe	limit	63
amount	value	cheap	check	salary	coin	purchase	70
debt	account	figure	due	expensive	profit	value	77
figure	debt	amount	afford	purchase	cheap	collect	84
credit	account	check	wealth	expensive	due	coin	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 9

government	county	independence	capital	convention	benefit	revolution	7
treaty	term	congress	tax	community	public	council	14
speech	elect	society	liberty	vote	governor	government	21
capital	council	public	treaty	benefit	society	county	28
vote	convention	term	congress	revolution	elect	speech	35
liberty	tax	independence	community	governor	capital	elect	42
convention	county	council	liberty	treaty	independence	speech	49
congress	community	governor	tax	term	vote	revolution	56
benefit	government	society	public	capital	tax	independence	63
treaty	government	county	governor	revolution	benefit	community	70
liberty	speech	vote	term	elect	council	society	77
public	congress	convention	congress	convention	elect	term	84
revolution	independence	county	speech	treaty	liberty	council	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 10

claws	dinosaur	oxen	mule	tiger	rat	creature	7
hatch	pigeon	shark	camel	mosquitoes	prey	jaws	14
parrot	salmon	toad	seal	jungle	flock	camel	21
creature	toad	rat	shark	prey	claws	mosquitoes	28
pigeon	salmon	mule	seal	tiger	oxen	hatch	35
dinosaur	jungle	flock	creature	mule	salmon	hatch	42
mosquitoes	prey	jaws	dinosaur	oxen	seal	tiger	49
claws	pigeon	parrot	jungle	toad	rat	shark	56
camel	creature	mule	parrot	hatch	prey	toad	63
shark	pigeon	mosquitoes	flock	rat	seal	jaws	70
tiger	camel	oxen	dinosaur	salmon	jungle	claws	77
pigeon	salmon	seal	mule	prey	dinosaur	hatch	84
mosquitoes	camel	oxen	jungle	claws	parrot	flock	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 11

claim	effect	witness	evidence	proof	grant	deed	7
determine	appeal	prison	crime	court	clerk	honest	14
trial	system	select	civil	chamber	file	witness	21
crime	file	proof	civil	honest	prison	system	28
clerk	chamber	grant	evidence	determine	select	deed	35
court	appeal	effect	claim	prison	clerk	select	42
proof	honest	civil	appeal	deed	file	evidence	49
witness	claim	system	court	effect	grant	trial	56
determine	chamber	crime	honest	witness	crime	file	63
deed	claim	determine	trial	proof	appeal	effect	70
clerk	select	evidence	civil	court	chamber	prison	77
system	grant	select	file	prison	court	crime	84
honest	determine	deed	claim	appeal	proof	chamber	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 12

yesterday	interval	century	slope	canyon	region	district	7
modern	generation	foreign	daily	noon	future	prairie	14
pace	ancient	property	zone	area	instant	generation	21
yesterday	interval	foreign	zone	century	noon	canyon	28
daily	prairie	slope	ancient	instant	region	modern	35
pace	district	area	property	future	modern	interval	42
generation	canyon	yesterday	instant	slope	area	region	49
daily	district	foreign	ancient	property	pace	zone	56
century	future	prairie	noon	area	pace	modern	63
district	prairie	daily	canyon	slope	yesterday	property	70
interval	ancient	generation	future	instant	zone	century	77
region	foreign	noon	future	foreign	slope	modern	84
century	daily	yesterday	pace	district	generation	property	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 13

secretary	hire	stock	manufacture	instructions	title	factory	7
succeed	maid	nurse	expert	permit	agent	task	14
experience	quit	boss	success	skill	labor	manufacture	21
secretary	nurse	maid	experience	task	title	succeed	28
instructions	labor	agent	success	stock	expert	skill	35
factory	quit	permit	hire	boss	stock	permit	42
skill	hire	nurse	quit	success	succeed	agent	49
title	secretary	maid	expert	instructions	labor	manufacture	56
experience	boss	factory	task	title	maid	expert	63
quit	nurse	stock	skill	factory	instructions	success	70
manufacture	permit	secretary	labor	experience	task	agent	77
boss	hire	succeed	maid	agent	instructions	factory	84
success	stock	manufacture	title	succeed	permit	boss	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 14

flood	tide	fleet	puddle	sink	channel	canal	7
shallow	current	liquid	craft	voyage	anchor	cargo	14
pirates	crew	port	fountain	dock	gallon	fountain	21
pirates	canal	crew	shallow	current	craft	flood	28
dock	port	fleet	anchor	liquid	gallon	tide	35
puddle	sink	voyage	cargo	channel	tide	puddle	42
channel	flood	fountain	cargo	voyage	anchor	canal	49
shallow	fleet	liquid	pirates	port	dock	craft	56
crew	sink	current	gallon	anchor	pirates	fleet	63
dock	channel	craft	shallow	port	crew	current	70
voyage	puddle	gallon	canal	cargo	tide	fountain	77
liquid	flood	current	pirates	puddle	craft	anchor	84
crew	gallon	fountain	dock	tide	cargo	shallow	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 15

tub	rug	deal	tend	bob	dew	ease	7
nor	dim	link	pit	deny	cord	urge	14
wax	rod	lack	web	cone	lever	link	21
urge	nor	rod	cone	dim	web	ease	28
tub	wax	deal	pit	rug	tend	lack	35
cord	bob	dew	lever	deny	cone	lack	42
dew	tub	deal	urge	link	dim	pit	49
ease	rug	tend	lever	web	wax	cord	56
nor	deny	bob	rod	bob	urge	wax	63
deny	link	lever	tub	cord	pit	nor	70
dim	lack	deal	dew	cone	web	ease	77
rug	rod	tend	wax	lack	tend	lever	84
nor	ease	dim	tub	cord	cone	bob	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 16

earn	sale	spend	shop	treasure	none	sold	7
bank	cost	pay	sell	price	tip	fortune	14
save	dollar	paid	charge	interest	waste	pay	21
none	sell	charge	bank	sale	price	fortune	28
tip	save	interest	dollar	treasure	sold	shop	35
cost	spend	earn	paid	waste	sell	paid	42
pay	dollar	spend	mone	price	sold	save	49
tip	earn	sale	charge	interest	shop	bank	56
fortune	waste	cost	treasure	shop	price	sale	63
dollar	waste	spend	fortune	paid	interest	cost	70
sold	save	earn	bank	pay	charge	sell	77
treasure	paid	tip	dollar	spend	earn	shop	84
none	pay	treasure	cost	bank	sold	sell	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 17

peace	holy	praise	soul	grace	glory	faith	*7*
accept	temple	sacrifice	evil	pray	music	god	*14*
death	symbol	minister	sin	wicked	worship	temple	*21*
god	peace	symbol	peace	worship	sacrifice	glory	*28*
wicked	faith	minister	music	soul	accept	holy	*35*
gracd	sin	pray	death	evil	praise	faith	*42*
death	soul	grace	minister	symbol	worship	wicked	*49*
sin	holy	god	praise	sacrifice	glory	temple	*56*
peace	accept	pray	evil	music	praise	accept	*63*
minister	music	god	temple	symbol	sacrifice	sin	*70*
holy	death	peace	wicked	pray	grace	evil	*77*
soul	faith	glory	worship	minister	temple	death	*84*
wicked	peace	evil	music	worship	pray	glory	*91*

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 18

visible	fashion	material	skirt	collar	silk	pants	7
handkerchief	helmet	cotton	fiber	woven	style	detail	14
sewing	type	uniform	design	jacket	tore	sewing	21
fiber	visible	pants	silk	type	style	detail	28
collar	fashion	cotton	helmet	handkerchief	woven	uniform	35
skirt	jacket	design	material	fashion	type	sewing	42
helmet	tore	pants	design	uniform	handkerchief	visible	49
jacket	skirt	material	detail	collar	style	fiber	56
cotton	silk	woven	fashion	visible	type	sewing	63
handkerchief	collar	woven	helmet	detail	fiber	jacket	70
tore	style	material	uniform	pants	skirt	design	77
cotton	handkerchief	fiber	tore	woven	uniform	skirt	84
design	style	cotton	detail	fashion	sewing	silk	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 19

magnet	cell	develop	invent	observe	balance	chemical	7
experiment	crystal	theory	instrument	bacteria	science	telescope	14
laboratory	scale	aluminum	pure	compass	mineral	crystal	21
pure	magnet	instrument	theory	chemical	balance	cell	28
observe	laboratory	develop	aluminum	mineral	scale	invent	35
experiment	compass	telescope	bacteria	science	compass	science	42
theory	cell	balance	chemical	mineral	observe	telescope	49
pure	aluminum	instrument	bacteria	laboratory	develop	invent	56
magnet	scale	experiment	crystal	magnet	cell	balance	63
experiment	develop	telescope	mineral	science	observe	invent	70
laboratory	pure	theory	instrument	aluminum	chemical	scale	77
bacteria	crystal	compass	pure	telescope	invent	balance	84
aluminum	science	mineral	instrument	experiment	chemical	compass	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 20

measure	frost	degree	contingent	temperature	tropical	lava	7
glacier	pattern	volcano	thunder	climate	altitude	severe	14
globe	trace	worst	polar	control	hurricane	frost	21
severe	hurricane	degree	control	climate	trace	continent	28
polar	volcano	measure	temperature	altitude	pattern	glacier	35
lava	globe	tropical	thunder	worst	volcano	polar	42
globe	climate	tropical	severe	temperature	measure	frost	49
lava	control	altitude	thunder	trace	degree	pattern	56
continent	worst	hurricane	clacier	altitude	continent	volcano	63
climate	frost	polar	control	lava	measure	tropical	70
severe	trace	glacier	hurricane	thunder	degree	worst	77
pattern	globe	temperature	worst	continent	hurricane	thunder	84
tropical	severe	control	climate	altitude	glacier	degree	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 21

journal	passage	sentence	alphabet	index	ink	magazine	7
topic	chapter	editor	verse	poem	article	tale	14
describe	art	language	paragraph	rhyme	plot	article	21
paragraph	describe	magazine	sentence	art	topic	passage	28
editor	index	plot	poem	alphabet	rhyme	chapter	35
language	ink	journal	tale	verse	magazine	alphabet	42
tale	sentence	index	poem	paragraph	ink	describe	49
article	art	chapter	topic	passage	language	verse	56
plot	editor	journal	rhyme	sentence	describe	tale	63
topic	passage	poem	alphabet	verse	index	magazine	70
chapter	art	ink	journal	editor	rhyme	plot	77
language	paragraph	article	paragraph	journal	plot	language	84
topic	editor	alphabet	tale	article	art	rhyme	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 22

freight	helicopter	vessel	bike	rail	gear	battery	7
deliver	carriage	shift	accident	merchant	device	transporation	14
saddle	brake	avenue	automatic	motion	vehicle	brake	21
accident	motion	saddle	gear	deliver	vessel	carriage	28
device	merchant	transporation	avenue	battery	freight	rail	35
shift	helicopter	automatic	vehicle	bike	vessel	brake	42
shift	avenue	motion	automatic	carriage	vehicle	battery	49
rail	bike	gear	merchant	helicopter	saddle	deliver	56
accident	transporation	device	freight	deliver	bike	carriage	63
vessel	automatic	gear	rail	merchant	vehicle	transporation	70
accident	device	avenue	motion	shift	helicopter	saddle	77
freight	brake	battery	gear	vehicle	automatic	carriage	84
battery	vessel	merchant	device	deliver	saddle	avenue	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 23

throne	border	custom	grand	popular	sword	quality	7
support	position	noble	duke	prince	royal	legend	14
duty	manner	statue	ancestors	lord	castle	quality	21
castle	legend	duty	support	royal	ancestors	lord	28
custom	prince	border	throne	position	manner	duke	35
grand	popular	statue	sword	noble	custom	border	42
grand	prince	ancestors	statue	throne	sword	quality	49
royal	duke	noble	duty	legend	support	lord	56
position	popular	manner	castle	support	manner	popular	63
ancestors	statue	custom	duke	sword	prince	position	70
throne	border	lord	quality	royal	noble	castle	77
grand	legend	duty	statue	border	legend	manner	84
popular	grand	duke	support	sword	duty	throne	91

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PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 24

member	hobby	luck	league	target	bike	sport	7
pad	tennis	fame	goal	challenge	object	score	14
loss	strength	leap	equipment	marbles	champion	score	21
loss	object	challenge	bike	member	hobby	sport	28
luck	equipment	target	tennis	leap	fame	marbles	35
strength	goal	pad	league	champion	league	strength	42
hobby	object	tennis	marbles	equipment	member	loss	49
champion	challenge	target	pad	score	leap	bike	56
sport	fame	luck	goal	member	pad	sport	63
loss	tennis	object	equipment	hobby	challenge	league	70
luck	target	champion	strength	marbles	score	bike	77
goal	fame	leap	marbles	tennis	sport	object	84
member	champion	target	pad	luck	score	leap	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 25

problem	locate	develop	fuel	drill	electric	lamp	7
gasoline	dam	mass	preserve	pump	solid	increase	14
population	crude	furnace	garbage	petroleum	necessary	electric	21
pump	problem	lamp	solid	develop	increase	petroleum	28
mass	population	gasoline	necessary	garbage	dam	locate	35
fuel	furnace	crude	drill	preserve	develop	preserve	42
electric	pump	drill	crude	mass	fuel	lamp	49
petroleum	gasoline	necessary	dam	furnace	problem	garbage	56
increase	population	solid	locate	garbage	furnace	preserve	63
petroleum	gasoline	locate	mass	develop	electric	population	70
fuel	dam	solid	drill	crude	pump	increase	77
problem	lamp	necessary	increase	develop	lamp	garbage	84
crude	gasoline	solid	problem	petroleum	locate	electric	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 26

especially	wedding	lantern	guest	decorate	include	movie	7
guitar	melody	social	favor	introduce	committee	theater	14
fork	rhythm	behavior	pleasure	greet	occasion	greet	21
rhythm	especially	theater	include	fork	committee	introduce	28
favor	wedding	melody	social	decorate	guest	lantern	35
behavior	occasion	pleasure	guitar	movie	rhythm	behavior	42
movie	melody	social	committee	rhythm	include	wedding	49
pleasure	fork	guest	greet	lantern	introduce	favor	56
guitar	especially	favor	decorate	rhythm	occasion	include	63
especially	fork	guest	movie	wedding	lantern	theater	70
committee	pleasure	behavior	introduce	social	melody	guitar	77
greet	decorate	guest	theater	especially	behavior	favor	84
movie	melody	rhythm	social	guitar	introduce	lantern	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 27

museum	ruin	hut	cement	ceiling	provide	cottage	7
concrete	furniture	entrance	construct	rent	furnish	gravel	14
column	shelter	clay	timber	shaft	hotel	construct	21
cement	entrance	rent	gravel	shelter	timber	column	28
museum	furnish	hut	ruin	furniture	hotel	provide	35
cottage	clay	ceiling	concrete	construct	furnish	furniture	42
provide	timber	cottage	shaft	ceiling	entrance	ruin	49
hut	column	rent	hotel	cement	gravel	clay	56
concrete	museum	shelter	construct	timber	shaft	museum	63
furnish	hotel	provide	gravel	entrance	hut	concrete	70
column	rent	shelter	cement	ceiling	cottage	ruin	77
clay	furniture	construct	shelter	clay	ceiling	shaft	84
column	timber	ruin	rent	furnish	provide	cement	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 28

demand	discuss	conversation	pause	phone	murmur	agree	7
yelled	interrupted	insist	report	opinion	protest	suggest	14
express	echo	pronounce	oppose	mention	declare	phone	21
suggest	agree	express	protest	discuss	conversation	oppose	28
declare	pronounce	report	opinion	echo	pause	insist	35
mention	interrupted	murmur	yelled	demand	declare	murmur	42
phone	interrupted	oppose	pronounce	insist	opinion	protest	49
demand	express	pause	suggest	report	mention	agree	56
conversation	yelled	echo	discuss	protest	echo	phone	63
declare	demand	mention	express	report	suggest	yelled	70
interrupted	agree	oppose	opinion	pronounce	pause	murmur	77
conversation	insist	discuss	demand	echo	conversation	yelled	84
declare	mention	discuss	express	report	oppose	insist	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 29

tobacco	clover	weeds	dairy	crop	nature	fertile	7
bloom	stable	produce	oats	harvest	stalk	vines	14
product	pasture	soil	acre	grazing	agriculture	soil	21
bloom	product	stalk	dairy	fertile	tobacco	weeds	28
vines	pasture	crop	clover	harvest	oats	grazing	35
nature	stable	acre	produce	agriculture	stalk	vines	42
bloom	clover	weeds	grazing	dairy	oats	harvest	49
fertile	produce	product	crop	pasture	nature	acre	56
soil	agriculture	stable	tobacco	nature	produce	vines	63
weeds	harvest	crop	stable	soil	product	fertile	70
clover	pasture	grazing	bloom	oats	stalk	tobacco	77
dairy	oats	nature	product	soil	fertile	dairy	84
stalk	crop	harvest	weeds	agriculture	bloom	grazing	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 30

separate	excellent	regular	slant	precious	enormous	least	7
tremendous	vast	splendid	dense	steady	private	convenient	14
familiar	delicate	polished	level	perfect	final	perfect	21
final	splendid	convenient	regular	dense	level	least	28
excellent	tremendous	enormous	polished	delicate	private	steady	35
slant	precious	vast	familiar	separate	dense	tremendous	42
splendid	steady	familiar	least	enormous	polished	private	49
excellent	convenient	vast	final	precious	regular	slant	56
delicate	separate	level	perfect	slant	polished	dense	63
level	tremendous	least	familiar	enormous	precious	perfect	70
excellent	convenient	delicate	private	splendid	separate	final	77
steady	vast	regular	level	polished	private	splendid	84
convenient	perfect	tremendous	slant	delicate	least	vast	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 31

unit	tenth	equal	length	total	sum	quarter	7
fraction	solve	subtract	double	square	parallel	zero	14
million	dozen	effort	arithmetic	multiply	height	million	21
equal	double	zero	fraction	total	length	height	28
solve	quarter	square	dozen	effort	tenth	subtract	35
unit	parallel	multiply	sum	arithmetic	zero	sum	42
double	solve	quarter	subtract	million	total	arithmetic	49
unit	effort	square	height	parallel	length	multiply	56
equal	dozen	tenth	fraction	length	effort	quarter	63
square	equal	total	million	fraction	zero	solve	70
subtract	double	arithmetic	tenth	parallel	dozen	unit	77
sum	height	equal	quarter	zero	tenth	million	84
unit	square	solve	fraction	multiply	double	parallel	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 32

burden	surround	wilderness	reputation	ridge	shepherd	fort	7
frontier	cactus	pioneer	powder	rifle	capture	territory	14
leather	settle	knot	partner	range	telegram	burden	21
fort	rifle	settle	powder	knot	pioneer	range	28
reputation	shepherd	partner	cactus	leather	surround	telegram	35
winderness	capture	frontier	territory	ridge	powder	territory	42
range	partner	rifle	wilderness	burden	surround	frontier	49
pioneer	knot	fort	leather	ridge	capture	reputation	56
telegram	settle	cactus	shepherd	pioneer	knot	reputation	63
powder	surround	wilderness	burden	frontier	settle	fort	70
rifle	territory	shepherd	capture	partner	telegram	leather	77
range	ridge	cactus	rifle	range	surround	pioneer	84
cactus	frontier	burden	wilderness	reputation	settle	fort	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 33

clue	code	blame	grave	bound	ghost	poison	7
link	monster	particular	examine	abandoned	terror	confused	14
plot	scheme	vanished	threaten	detective	mystery	link	21
detective	scheme	mystery	vanished	particular	blame	grave	28
ghost	monster	poison	clue	threaten	code	plot	35
examine	bound	confused	terror	abandoned	particular	grave	42
abandoned	plot	scheme	vanished	detective	terror	examine	49
threaten	clue	confused	bound	mystery	poison	ghost	56
code	link	monster	blame	link	plot	grave	63
detective	abandoned	bound	terror	code	monster	scheme	70
threaten	vanished	poison	examine	blame	clue	particular	77
confused	mystery	detective	mystery	grave	ghost	examine	84
plot	clue	link	terror	bound	code	confused	91

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ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
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SSAT-Grade 8
Unit 34

sorrow	shock	desire	concern	encouraged	pity	mood	7
bitter	weary	pride	humor	awkward	bore	charm	14
doubt	anger	anxious	relief	rage	admire	doubt	21
bore	charm	desire	bitter	anxious	concern	rage	28
sorrow	anger	relief	weary	humor	shock	awkward	35
encouraged	pity	pride	mood	awkward	humor	pity	42
anger	relief	admire	sorrow	shock	concern	mood	49
rage	bitter	bore	pride	anxious	doubt	encouraged	56
weary	charm	desire	admire	encouraged	shock	bitter	63
pride	relief	humor	charm	rage	anger	mood	70
anxious	awkward	weary	desire	concern	pity	bore	77
sorrow	concern	anxious	anger	humor	bitter	weary	84
mood	encouraged	charm	admire	sorrow	bore	pity	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 35

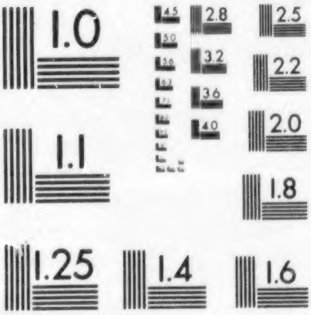
peculiar	ordinary	crazy	shrill	intelligent	rough	handsome	7
proper	practical	queer	brilliant	slender	slight	stern	14
dull	broad	odd	secure	cruel	vain	stern	21
dull	odd	secure	vain	broad	brilliant	ordinary	28
slight	practical	peculiar	intelligent	proper	queer	broad	35
rough	dull	crazy	cruel	vain	handsome	shrill	42
slender	proper	rough	crazy	odd	practical	slight	49
secure	brilliant	peculiar	dull	handsome	queer	intelligent	56
ordinary	broad	vain	cruel	shrill	slender	stern	63
handsome	shrill	brilliant	proper	odd	practical	crazy	70
dull	rough	slender	broad	ordinary	peculiar	intelligent	77
vain	slight	queer	stern	cruel	stern	secure	84
proper	peculiar	ordinary	dull	crazy	brilliant	practical	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 36

thrust	damage	stall	sketch	avoid	burst	buoy	7
direct	peered	slice	perform	obey	grasp	connect	14
release	exchange	slid	twist	comfort	establish	slice	21
direct	burst	release	stall	peered	sketch	perform	28
connect	buoy	exchange	slid	thrust	twist	grasp	35
comfort	avoid	obey	damage	buoy	thrust	comfort	42
burst	peered	connect	twist	perform	establish	slice	49
release	stall	sketch	grasp	obey	slid	damage	56
exchange	avoid	direct	damage	burst	direct	release	63
connect	thrust	establish	obey	twist	avoid	buoy	70
grasp	exchange	slid	sketch	comfort	perform	slice	77
stall	peered	avoid	grasp	establish	slid	damage	84
perform	peered	obey	sketch	stall	connect	slice	91

PG


1.0
4.5
5.0
5.6
6.3
7.1
8.0
9.0
2.8
3.2
3.6
4.0
2.5
2.2
2.0
1.1
1.8
1.25
1.4
1.6

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS
STANDARD REFERENCE MATERIAL 1010a
(ANSI and ISO TEST CHART No. 2)

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 37

brass	kettle	twigs	peak	weeds	lawn	lid	7
canvas	sack	bamboo	stove	coral	tape	reeds	14
moss	mold	ashes	platform	limbs	broom	stove	21
lawn	moss	limbs	peak	platform	weeds	kettle	28
tape	sack	reeds	twigs	bamboo	coral	mold	35
canvas	ashes	lid	broom	brass	canvas	ashes	42
lawn	reeds	kettle	twigs	limbs	platform	broom	49
brass	bamboo	moss	sack	coral	peak	stove	56
mold	weeds	tape	lid	limbs	coral	peak	63
kettle	lawn	lid	weeds	platform	sack	tape	70
ashes	stove	broom	twigs	canvas	moss	mold	77
brass	bamboo	reeds	coral	brass	kettle	moss	84
tape	canvas	twigs	lid	sack	bamboo	limbs	91

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SSAT-Grade 8
Unit 38

delay	limit	upward	beneath	seldom	regard	further	7
immediate	extend	project	principal	rare	provide	seldom	14
delay	underneath	immediate	provide	principal	purpose	result	21
extend	upward	protect	proceed	limit	beneath	rare	28
further	distant	regard	obtain	project	purpose	protect	35
principal	rare	result	proceed	provide	obtain	regard	42
limit	further	distant	underneath	project	beneath	upward	49
delay	immediate	seldom	extend	limit	rare	immediate	56
project	upward	regard	seldom	extend	underneath	beneath	63
obtain	result	proceed	provide	protect	distant	purpose	70
delay	principal	further	underneath	limit	purpose	result	77
regard	upward	obtain	provide	further	immediate	proceed	84
principal	extend	rare	seldom	project	beneath	upward	91

VOCABULARY DEVELOPMENT

Unit 1 - Homonyms

Unit 2 - Antonyms

Unit 3 - Synonyms

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

think-mark

Unit 1
Homonyms

aunt:	ate	ant	right:	write	ring	beat:	beet	break	3
feet:	foot	feat	blew:	blue	blow	fare:	fair	foot	6
meat:	mark	meet	heel:	heal	heat	tale:	talk	tail	9
would:	word	wood	beach:	beech	bring	birth:	berth	beat	12
made:	make	maid	seam:	smell	seem	lone:	loan	long	15
fur:	fir	fit	acts:	and	ax	know:	now	no	18
road:	rode	rod	ad:	add	and	deer:	dear	doing	21
son:	sun	so	mail:	meak	male	aid:	aide	aunt	24
bare:	book	bear	pear:	pretty	pain	pail:	pain	pale	27
bale:	best	bail	slay:	sleigh	said	peel:	peal	pare	30
pain:	pane	pick	board:	bend	bored	piece:	peace	please	33
be:	been	bee	break:	bring	brake	way:	well	weigh	36
sea:	sure	see	rain:	ring	rein	buy:	by	but	39

1051 1052

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

think-mark

Unit 2
Antonyms

strong:	big	weak	thin:	soft	fat	huge:	large	small	3
leave:	veil	stay	hot:	angry	cold	good:	stop	bad	6
come:	go	enter	save:	spend	take	many:	few	number	9
soft:	narrow	hard	broad:	narrow	wide	courage:	coward	easy	12
light:	heavy	thick	warm:	right	cool	blunt:	peace	sharp	15
swift:	slow	fast	wet:	quick	dry	hot:	cold	dark	18
careful:	wrap	careless	give:	take	tow	laugh:	hail	cry	21
sleep:	big	awake	quiet:	wet	noisy	polite:	rude	nice	24
fast:	slow	top	stop:	go	loose	clear:	cloudy	calm	27
hate:	love	hale	friend:	wet	enemy	long:	short	shoe	30
cheery:	heart	gloomy	rich:	poor	prey	full:	light	empty	33
walk:	run	step	crooked:	straight	quarts	happy:	light	sad	36
in:	out	enter	strength:	rein	weakness	over:	under	down	39

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

think-mark

Unit 3
Synonyms

forest:	near	woods	large:	big	grass	busy	active	heal	3
able:	capable	least	shut:	close	open	fix:	sad	repair	6
tidy:	real	neat	passive:	meet	idle	large:	level	huge	9
present:	creep	gift	single:	one	idol	home:	house	hurt	12
stay:	big	remain	center:	middle	new	brave:	bold	sew	15
comical:	funny	told	told:	near	spoke	rapid:	pride	speedy	18
abandon:	leave	live	near:	close	woods	blend:	mix	berth	21
impure:	soul	dirty	sick:	sale	ill	pretty:	beautiful	tall	24
bright:	dough	brilliant	misery:	rose	pain	assault:	road	attack	27
say:	long	tell	choose:	select	real	grasp:	hold	none	30
cut:	sever	laid	raise:	large	lift	coarse:	rough	smooth	33
regret:	sorry	hire	protect:	done	guard	huge:	fall	large	36
clumsy:	strait	awkward	throw:	eye	toss	hurt:	injure	glad	39

STUDY SKILLS

SS-1	Hear Directions*
SS-2	See Directions*
SS-3	Alphabetical order - 1st letter*
SS-4	Alphabetical order - 2nd letter*
SS-5	Alphabetical order - 3rd letter*
SS-6	Alphabetical order - 1st, 2nd, 3rd letter*
SS-7	Guide Words
SS-7A	Guide Words Key
SS-8	Guide Words
SS-8A	Guide Words Key
SS-9	Table of Contents*
SS-10	Index*
SS-11	Maps*

see-write
hear-write

SS-1 & SS-2
(Directions)*

When measuring students' proficiency on oral and written directions it is beneficial for the teacher to devise direction practice sheets which relate to the student's every day work.

It may be advisable to increase timings to two or three minutes so the students may have a longer period to complete these skills. See RR-16 for instructions on checking and recording. A sample practice sheet for see-write directions has been included for use with students. This practice sheet can also be used as a pattern for making other direction sheets.

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

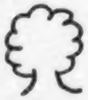
see-write

Directions*

Read the sentences below & follow the directions in each one.

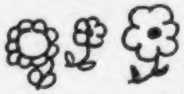
1. Write the missing letter in the word she. sh_

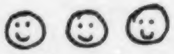
2. Draw a line under the last word in the row.
each every even

3. Draw two apples on the tree. 

4. Circle the middle letter. T H E

5. Write the word toy in the box. ☐

6. Put an X on the little flower. 

7. Put an X on the first smiling face. 

8. Draw a line under the word store.
June and I went to the store.

9. Draw a tree

10. Draw a line under the first word.
book ways days

11. Write the word his in the box. ☐

12. Draw a big circle.

13. Draw a circle around the word with the s at the end.
apple s apples

14. Write the missing letter in the word cat. c_t

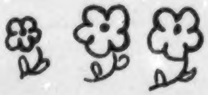
15. Draw a line under the middle word in the row.
dot see black

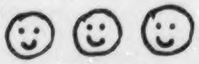
16. Draw a big circle.

17. Write the word toy in the box. ☐

18. Draw a triangle.

19. Put a circle around the last number.
5 3 5 2 1

20. Put an X on the little flower. 

21. Put an X on the first smiling face. 

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Alphabetical Order
by 1st letter*

Number in order each set of words by alphabetical order

___ to
___ and
___ in
___ he

___ too
___ go
___ down
___ mother

___ father
___ then
___ came
___ no

___ make
___ them
___ blue
___ an

___ the
___ you
___ it
___ at 20

___ my
___ little
___ was
___ big

___ come
___ when
___ some
___ get

___ around
___ ball
___ long
___ once

___ is
___ she
___ we
___ on

___ so
___ box
___ into
___ his 40

___ have
___ there
___ about
___ from

___ saw
___ green
___ eat
___ how

___ see
___ not
___ can
___ are

___ had
___ like
___ did
___ old

___ here
___ just
___ who
___ or 60

___ say
___ yes
___ went
___ run

___ do
___ up
___ for
___ one

___ his
___ as
___ baby
___ this

___ if
___ girl
___ think
___ work

___ three
___ put
___ jump
___ help 80

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

SS-4

Alphabetical Order
by 2nd letter*

Number in order each set of words by alphabetical order

___ at
___ an
___ apple
___ alpha

___ father
___ fern
___ fuse
___ fickle

___ dog
___ dip
___ den
___ dub

___ lake
___ like
___ lemon
___ loot

___ to
___ the
___ two
___ tire 20

___ came
___ come
___ children
___ creep

___ game
___ give
___ gun
___ glue

___ money
___ mary
___ me
___ mud

___ hope
___ had
___ hen
___ him

___ yes
___ yip
___ yawn
___ yup 40

___ hot
___ hat
___ hit
___ he

___ round
___ red
___ ripe
___ run

___ like
___ lump
___ louse
___ lap

___ run
___ ran
___ ripe
___ redo

___ jump
___ join
___ jelly 60
___ jaw

___ what
___ was
___ wrap
___ well

___ old
___ on
___ of
___ or

___ six
___ set
___ sun
___ sat

___ eat
___ elephant
___ edit
___ effort

___ nut
___ noon
___ nice
___ nap 80

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Alphabetical Order
by 3rd letter*

Number in order each set of words by alphabetical order

___ dress
___ dry
___ drive
___ draw

___ which
___ where
___ who
___ why

___ swing
___ sweet
___ swam
___ swoop

___ hang
___ happy
___ hay
___ hard

___ ply
___ plan
___ please
___ plow 20

___ train
___ try
___ tree
___ trip

___ drum
___ drink
___ dress
___ drop

___ needle
___ net
___ neck
___ neat

___ bring
___ brave
___ brook
___ Byron

___ slow
___ sleep
___ slide
___ sly 40

___ frog
___ fruit
___ fresh
___ fright

___ log
___ lone
___ loft
___ look

___ grass
___ grow
___ grind
___ green

___ clock
___ clay
___ clap
___ clip

___ bring
___ brother
___ brew
___ brand 60

___ rug
___ ruin
___ rumor
___ rub

___ flag
___ fly
___ flew
___ flower

___ block
___ black
___ blue
___ bleep

___ cabbage
___ cafe
___ cactus
___ calf

___ quilt
___ quality
___ queen
___ quail 80

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

SS-6

Alphabetical Order
(1st, 2nd, 3rd letter)*

Number in order each set of words by alphabetical order

___ after
___ day
___ were
___ write

___ street
___ call
___ cold
___ home

___ know
___ found
___ ate
___ thank

___ down
___ mother
___ baby
___ but

___ only
___ would
___ am
___ very

20

___ man
___ may
___ car
___ drink

___ try
___ kind
___ show
___ cut

___ had
___ like
___ him
___ her

___ has
___ feet
___ many
___ fun

___ give
___ sit
___ keep
___ bed

40

___ draw
___ grow
___ fine
___ gave

___ not
___ on
___ the
___ he

___ pretty
___ any
___ take
___ back

___ want
___ door
___ does
___ pets

___ better
___ something
___ every
___ pull

60

___ yes
___ went
___ run
___ black

___ its
___ play
___ made
___ must

___ read
___ head
___ off
___ four

___ answer
___ buy
___ done
___ hope

___ come
___ when
___ around
___ there

80

1069

1068

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SS-7
Guide Words

Mark the words that come on the same page as the guide words

breathe — bridle

___bribe ___brevity
___bronco ___breather
___breed ___broken
___bring ___brick
___bridge ___brief *6*

other — outclass

___oven ___ought
___otherwise ___ottoman
___oriental ___ourselves
___orifice ___organ
___ounce ___outlaw *11*

apparel — approachable

___appease ___approve
___apparatus ___appoint
___apricot ___appetite
___appreciate ___apron
___apple ___apprehend *17*

honor — hopscotch

___hitch ___hooligan
___Hopi ___homage
___hornet ___horizon
___hopper ___hope
___holiday ___horror *22*

describable — despicable

___detachment ___desperation
___desertion ___despite
___dedicate ___designate
___despair ___desirable
___deserve ___despise *28*

launch — lead

___latter ___lay
___lazy ___leach
___laugh ___leaf
___laundry ___lavish
___law ___lawyer *35*

OC
PS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SS-7 A

Guide Words
Key

Mark the words that come on the same page as the guide words

breathe bridle

X___bribe
___bronco
X___breed
___bring
X___bridge

X___brevity
X___breather
___broken
X___brick
___brief 6

other outclass

___oven
X___otherwise
___oriental
___orifice
X___ounce

X___ought
X___ottoman
X___ourselves
___organ
___outlaw 11

apparel approachable

X___appease
___apparatus
___apricot
X___appreciate
X___apple

___approve
X___appoint
X___appetite
___apron
X___apprehend 17

honor hopscotch

___hitch
X___Hopi
___hornet
X___hopper
___holiday

X___hooligan
X___homage
___horizon
X___hope
___horror 22

describable despicable

___detachment
X___desertion
___dedicate
X___despair
X___deserve

X___desperation
___despite
X___designate
X___desirable
___despise 28

launch lead

___latter
X___lazy
___laugh
X___laundry
X___law

X___lay
X___leach
___leaf
X___lavish
X___lawyer 35

1072

1073

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SS-8
Guide Words

Mark the words that come on the same page as the guide words

moreover ———— math

___mope
___moss
___mortgage
___morbid
___mortar
___motel
___motion
___moron
___move
___morning 6

rind ———— riverside

___risk
___rim
___rival
___rising
___robe
___ride
___ritual
___road
___rigid
___ripple 11

glint ———— go

___gnat
___glen
___going
___glory
___glisten
___glaze
___glutton
___gnaw
___globe
___given 17

commune ———— competitiveness

___common
___communion
___commotion
___community
___compare
___compete
___complain
___compass
___company
___compensate 24

taster ———— tease

___task
___taunt
___tattle
___team
___tedious
___tax
___tear
___tar
___teach
___teem 30

expectantly ———— expression

___express
___extend
___export
___expense
___expand
___extreme
___explore
___expert
___exile
___experiment
36

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SS-8 A

Guide Words
Key

Mark the words that come on the same page as the guide words

moreover — math

___mope   X motel

X moss   ___motion

X mortgage   X moron

___morbid   ___move

X mortar   X morning 6

rind — riverside

X risk   ___ride

___rim   X ritual

X rival   ___road

X rising   ___rigid

___robe   X ripple 11

glint — go

X gnat   ___glaze

___glen   X glutton

___going   X gnaw

X glory   X globe

X glisten   ___given 17

commune — competitiveness

___common   X compete

X communion   ___complain

___commotion   X compass

X community   X company

X compare   X compensate 24

taster — tease

___task   X tax

X taunt   X tear

X tattle   ___tar

X team   X teach

___tedious   ___teem 30

expectantly — expression

X express   ___extreme

___extend   X explore

X export   X expert

X expense   ___exile

___expand   X experiment 36

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

SS-9, 10, & 11

Table of Contents*
Index*
Maps*

When measuring proficiency on Table of Contents, Index, and Map Skills it is beneficial for the teacher to devise practice sheets which apply directly to the students' classroom work. It may be advisable to increase timings to two or three minutes so the students may have a longer period to complete these detailed skills. The teacher may also have a truer measure of the students' proficiency by providing a longer timing. Remember for any timing over one minute the correct and incorrect score should be divided by the number of minutes to get the count per minute. (For example, Correct score = 32; Incorrect score = 9. Time period = 2 minutes. 32/2 = 16 correct count per minute. 9/2 = 4.5 incorrect count per minute.) These scores can now be recorded and charted.

Sample practice sheets for Table of Contents and Index have been included for use with students. These practice sheets can also be used as a pattern for making other related practice sheets.

OCPS

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

SS-9
Table of Contents*

TABLE OF CONTENTS PAGE

History of Chocolate........... 3
What Chocolate is Made of......29
Kinds of Chocolate.............33
Chocolate Candy................35
Chocolate Drinks...............42
Chocolate Desserts.............57

1. What page would tell you who invented chocolate?_____

2. What 2 chapters would tell you what is used to make chocolate?_____

3. What chapter tells about candy made from chocolate?_____

4. What page would you turn to if you wanted to find out about flavors of chocolate?_____

5. If you wanted to make a special dessert, what page would you turn to?_____

6. If you wanted information on how to make a chocolate cheese cake what page would you turn to?_____

7. Where can you look to find out how to make chocolate drinks?

8. What page would you turn to to find out what year chocolate was discovered?_____

ORANGE COUNTY PUBLIC SCHOOLS
PRECISION TEACHING PROJECT
ORLANDO, FLORIDA

see-write

Index*

E

English Toy Spaniels..62
Eye Care..............41

F

Feeding............... 5
First Aid.............31
Fox Terriers..........62
Fractures.............32

G

Golden Retrievers...58
Great Danes.........59
Grooming............43

H

Heart Worms.........27
Heat Stroke.........35
Housebreaking.......13
Humane Society......54

1. Which page would give you some tips on grooming your dog?___

2. Where would you look if you wanted information about English Toy Spaniels?___

3. If you wanted information about the Humane Society where would you look?___

4. If your dog broke his leg which page would give you some information?___

5. If you want to housebreak your puppy which page would give you some tips?___

6. Where would you look if you needed to know the amount to feed your dog?___

7. Which page would give you some facts about taking care of your dog's eye?___

8. Where would you look if your dog faints on a hot day?___